

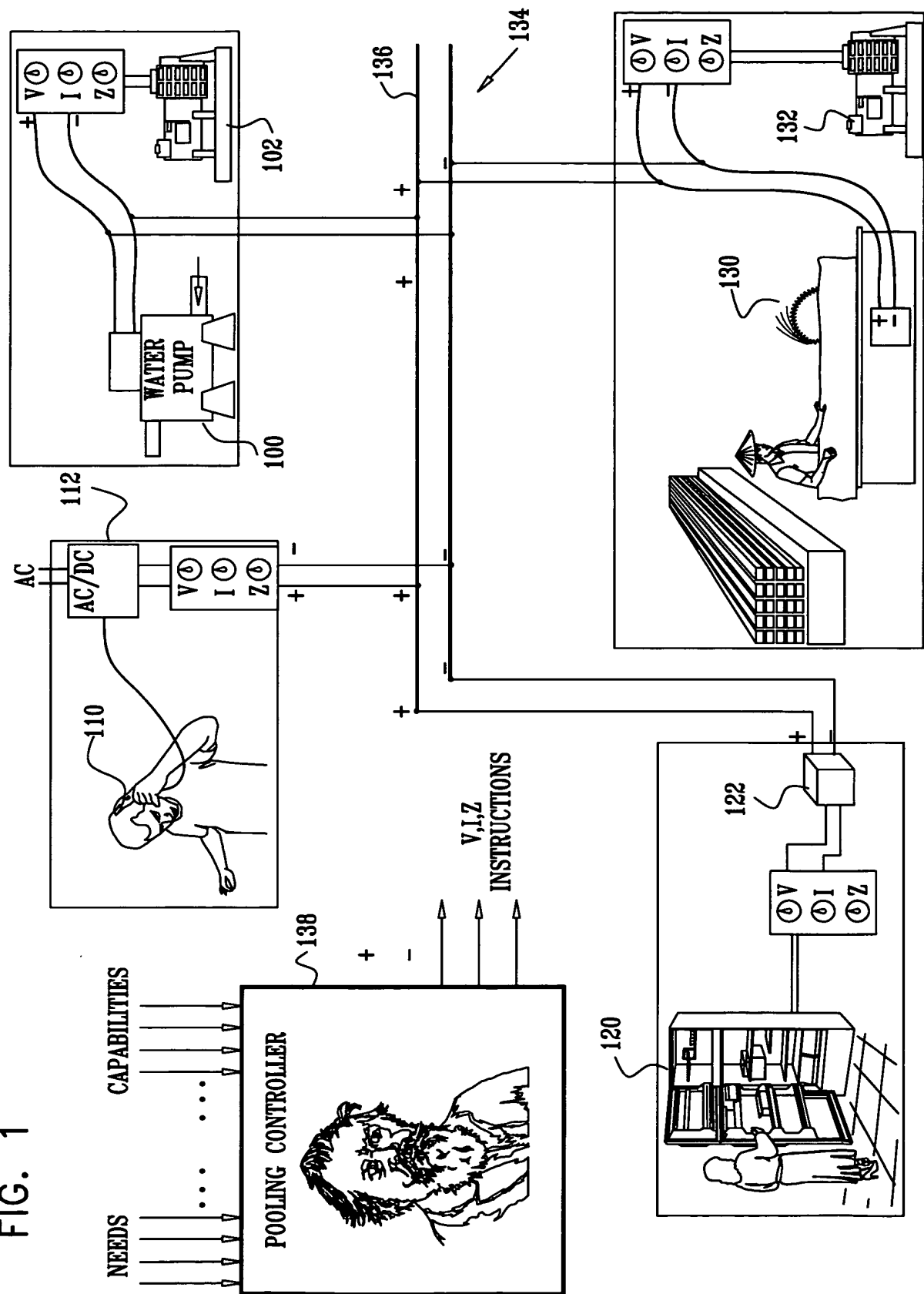
[illegible]

FIG. 2

The diagram illustrates a control system architecture. At the top, a 'FEED BACK' block provides input to a 'DYNAMIC CLOSED LOOP POOLING CONTROLLER'. This controller has multiple inputs labeled 'NEEDS' and 'CAPABILITIES' and outputs three arrows labeled 'ELECTRICAL', 'POWER', and 'CONTROL'. Below the controller is a 'BATTERY ASSEMBLY 212' with a monitor icon labeled '210'. To the right, a 'VEHICLE COMPUTER 200' is connected to a 'BATTERY ASSEMBLY 202'. At the bottom, an 'ALARM 220' is connected to a 'BATTERY ASSEMBLY 222'. A 'WINDOW DRIVE ASSEMBLY 230' is also shown. A central horizontal line with '+' and '-' signs represents a power distribution bus, with arrows indicating connections to the various battery assemblies and components.

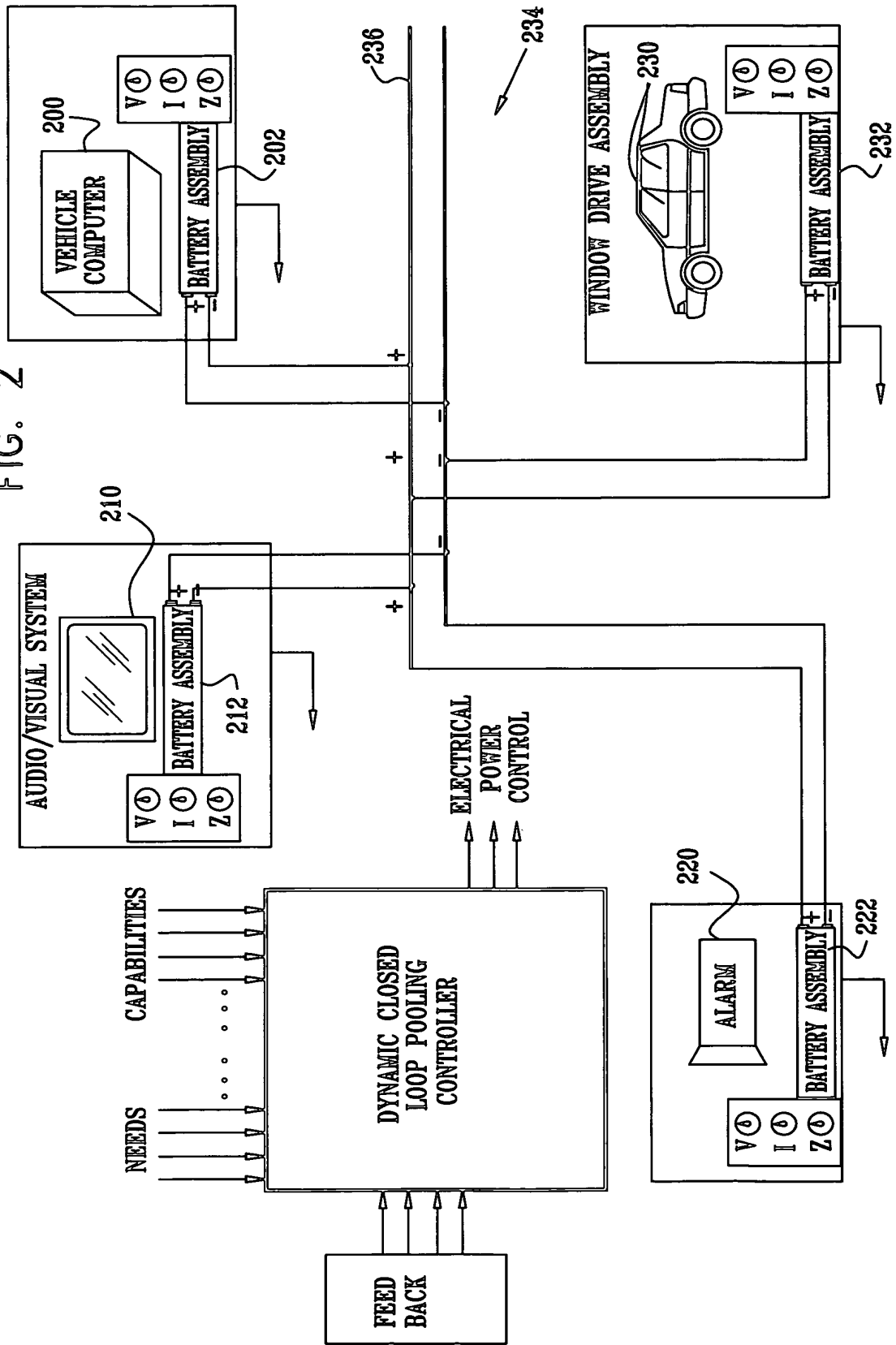


FIG. 3

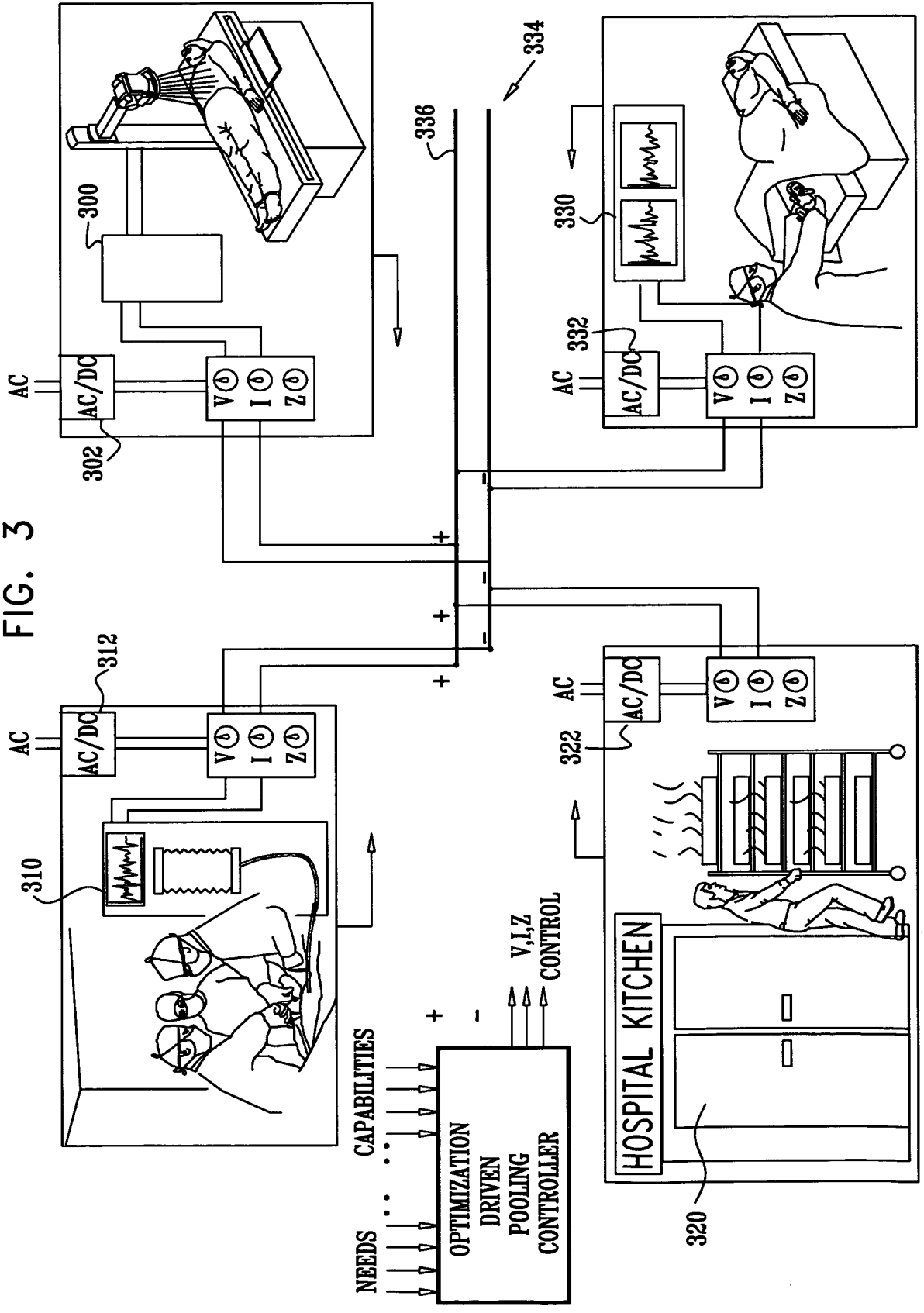
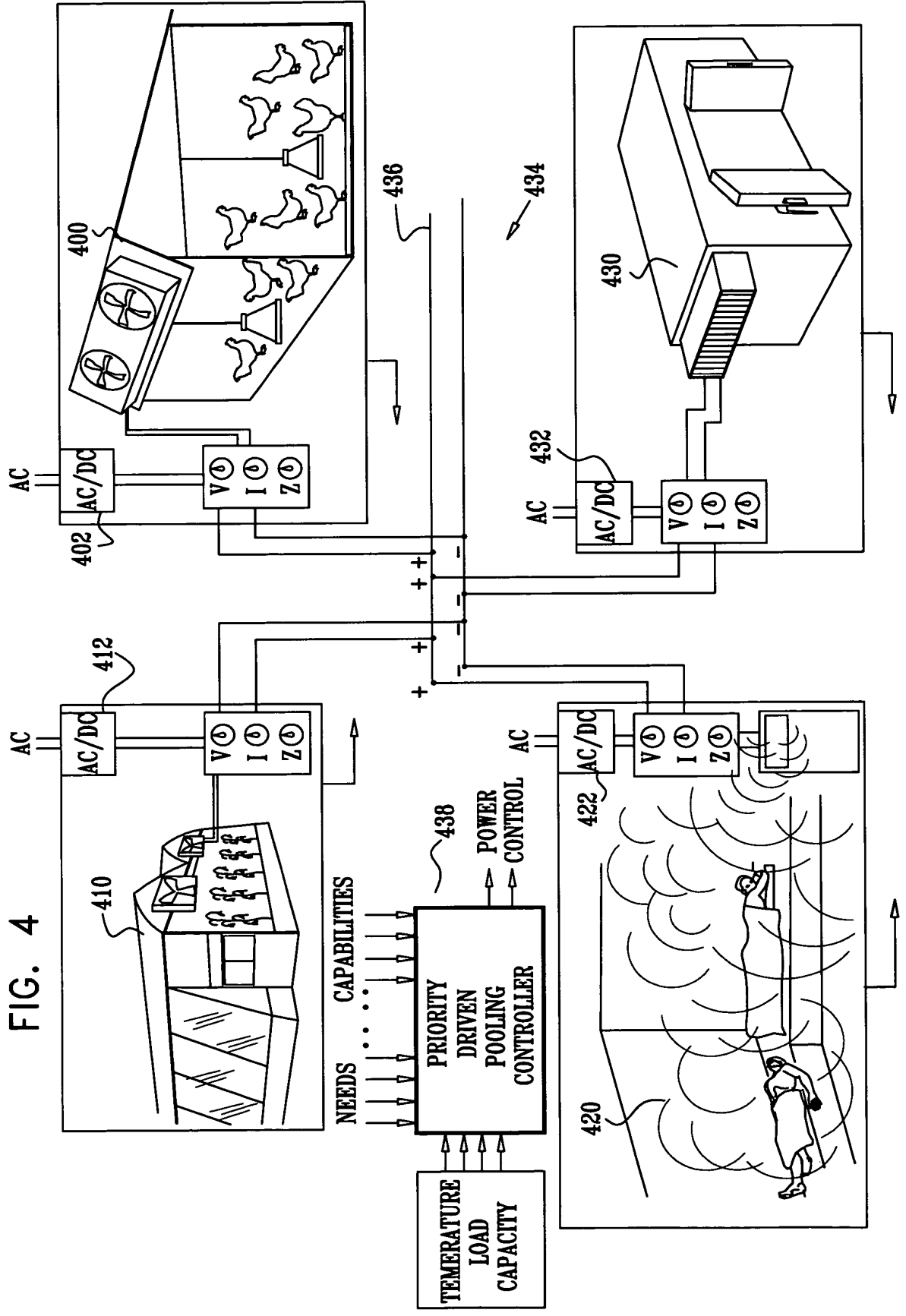


FIG. 4



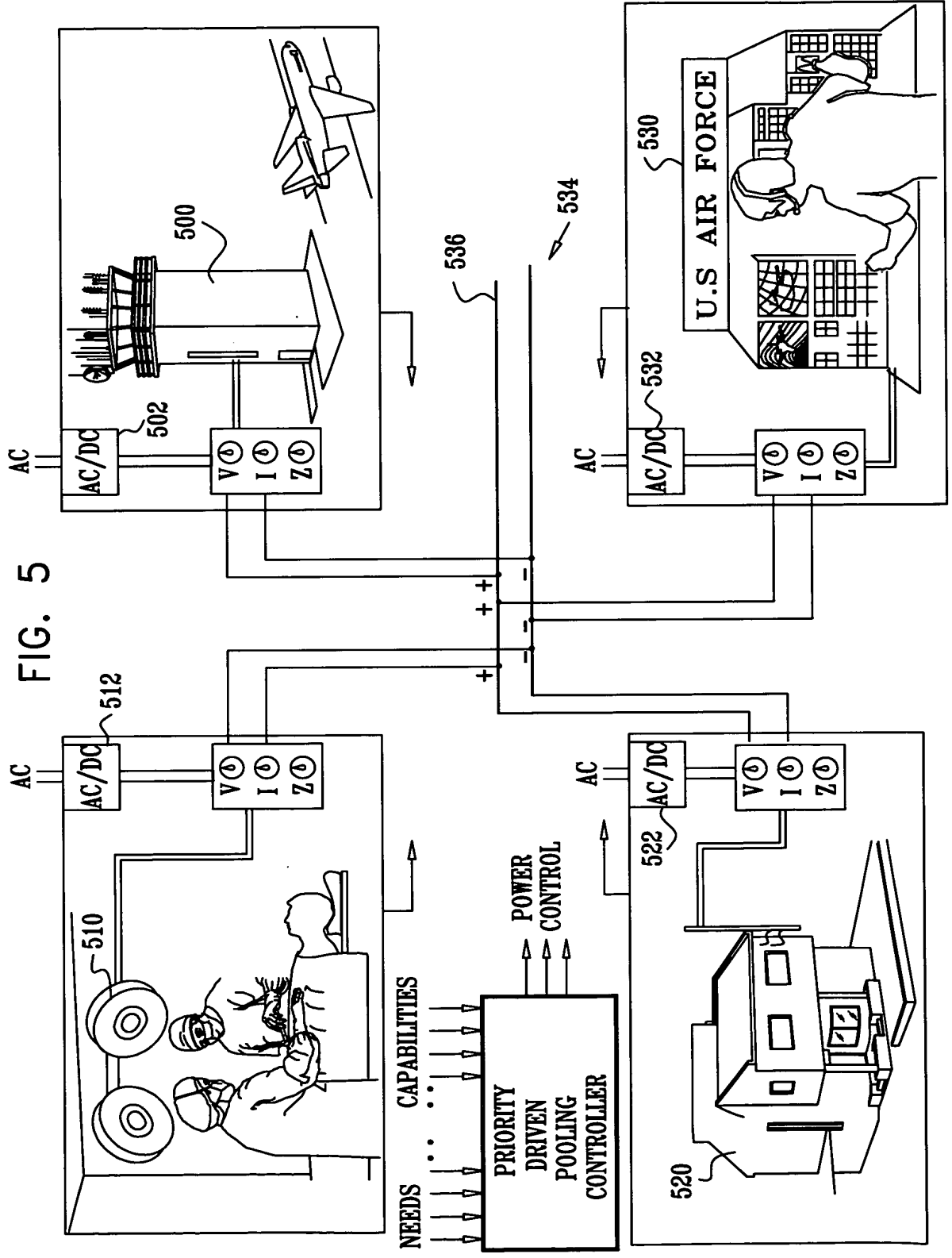


FIG. 6

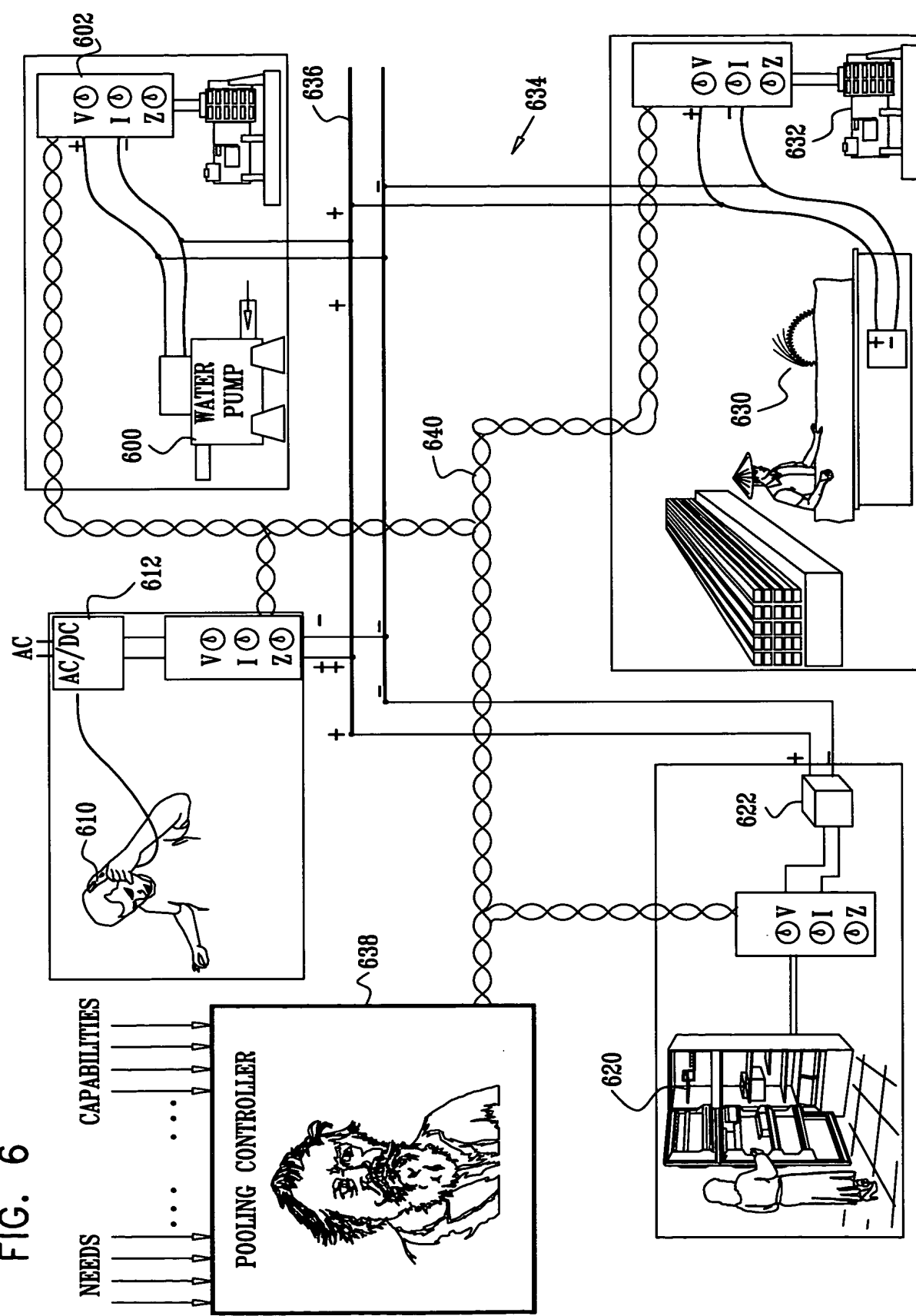


FIG. 7

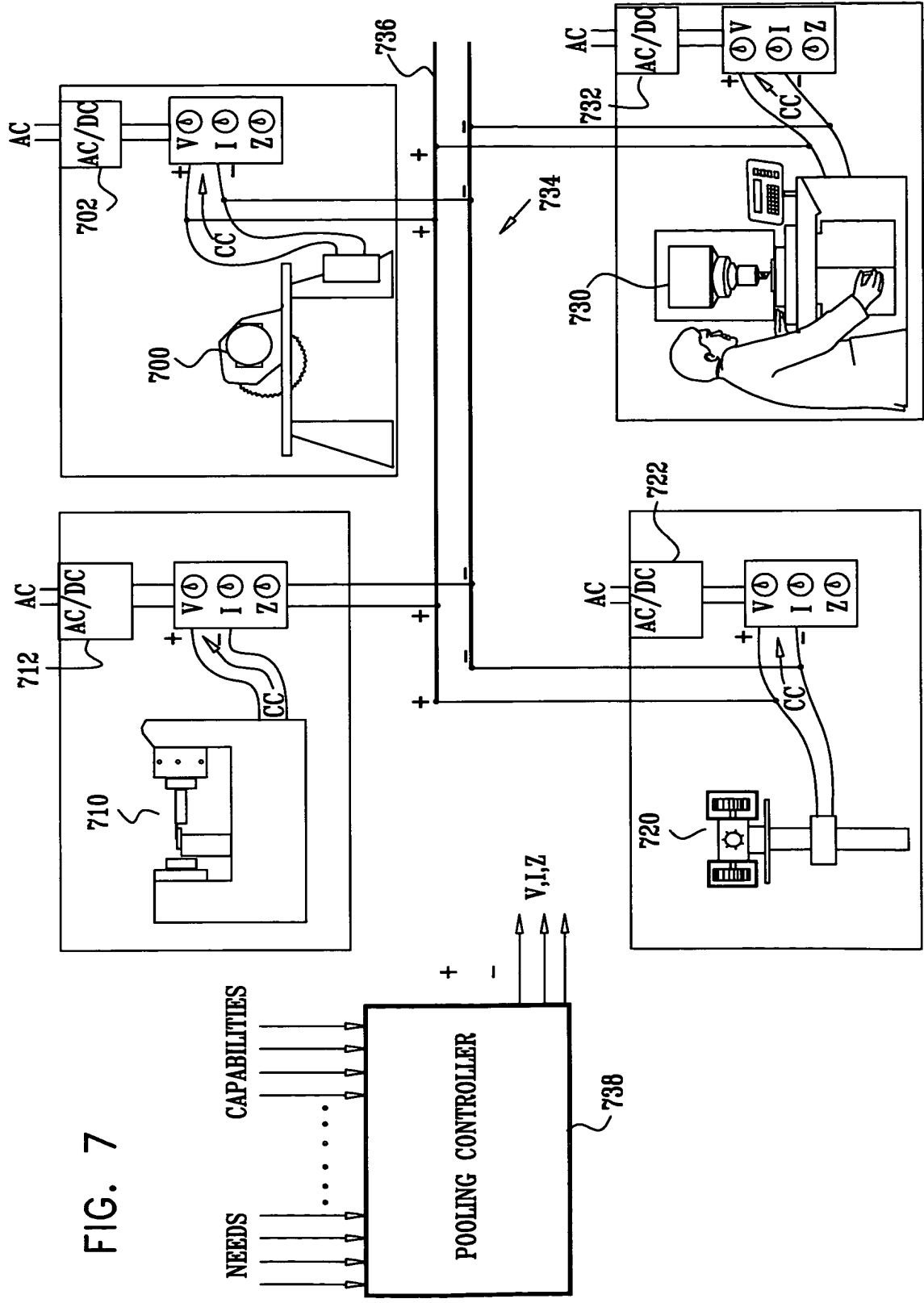


FIG. 8

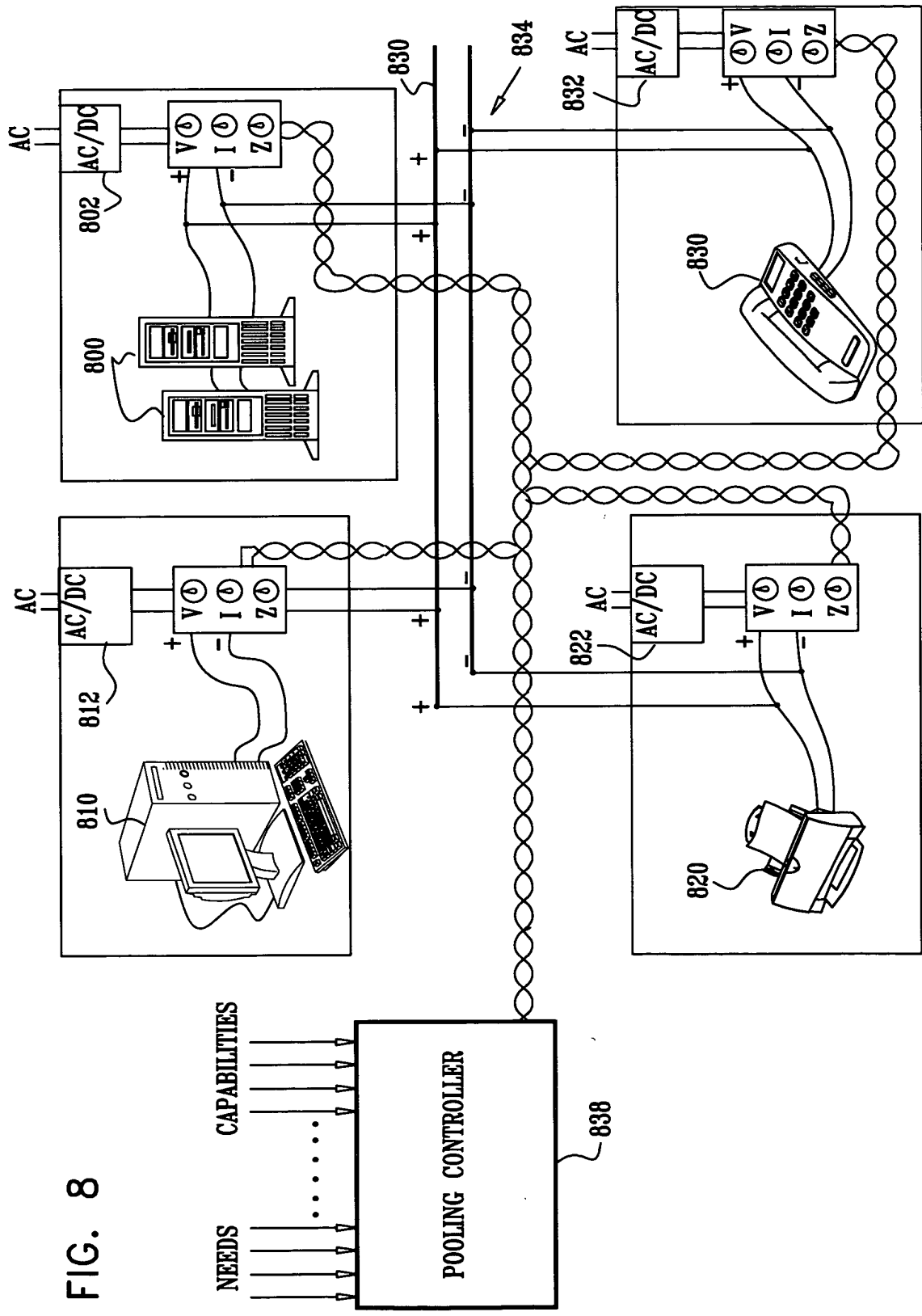


FIG. 9

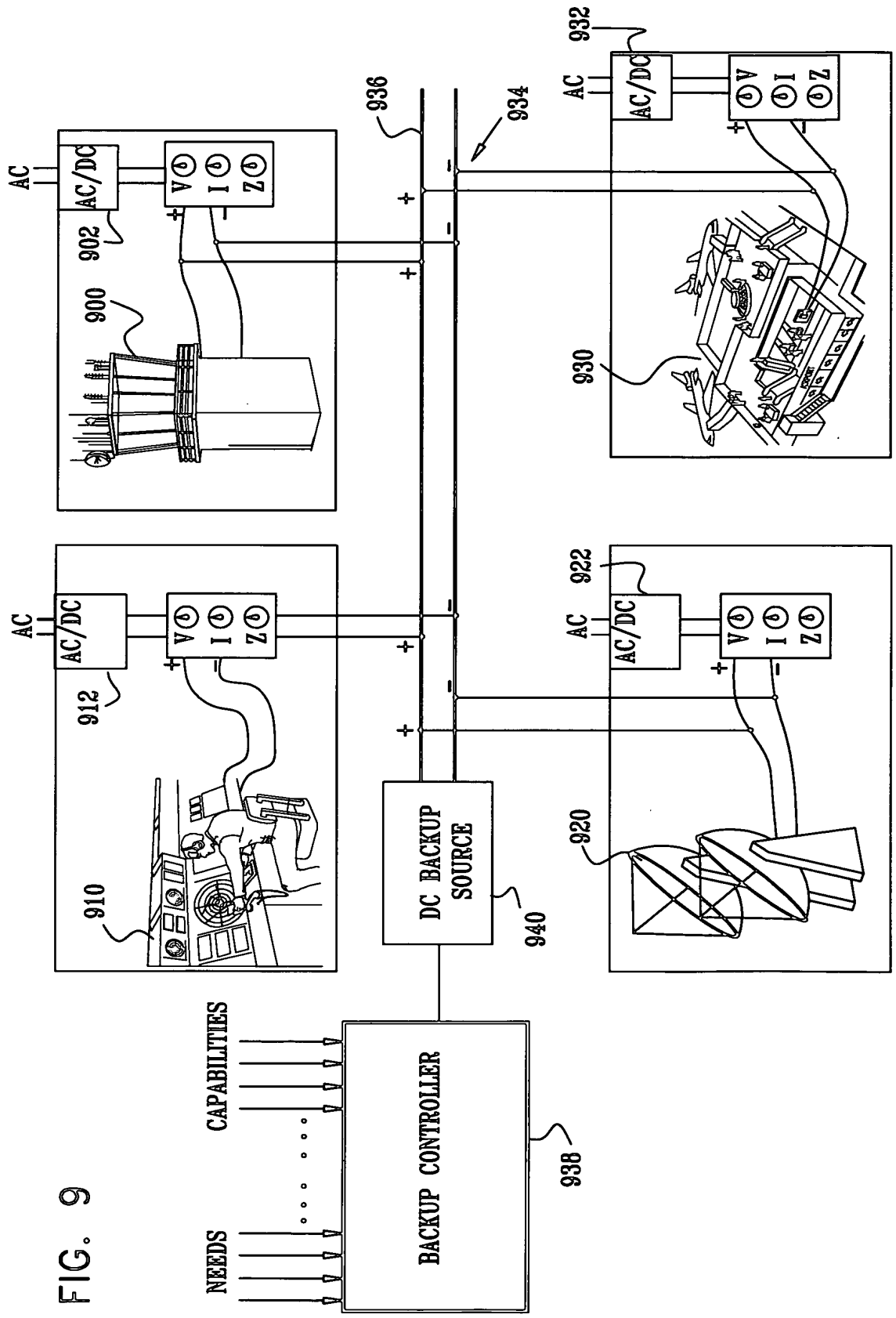
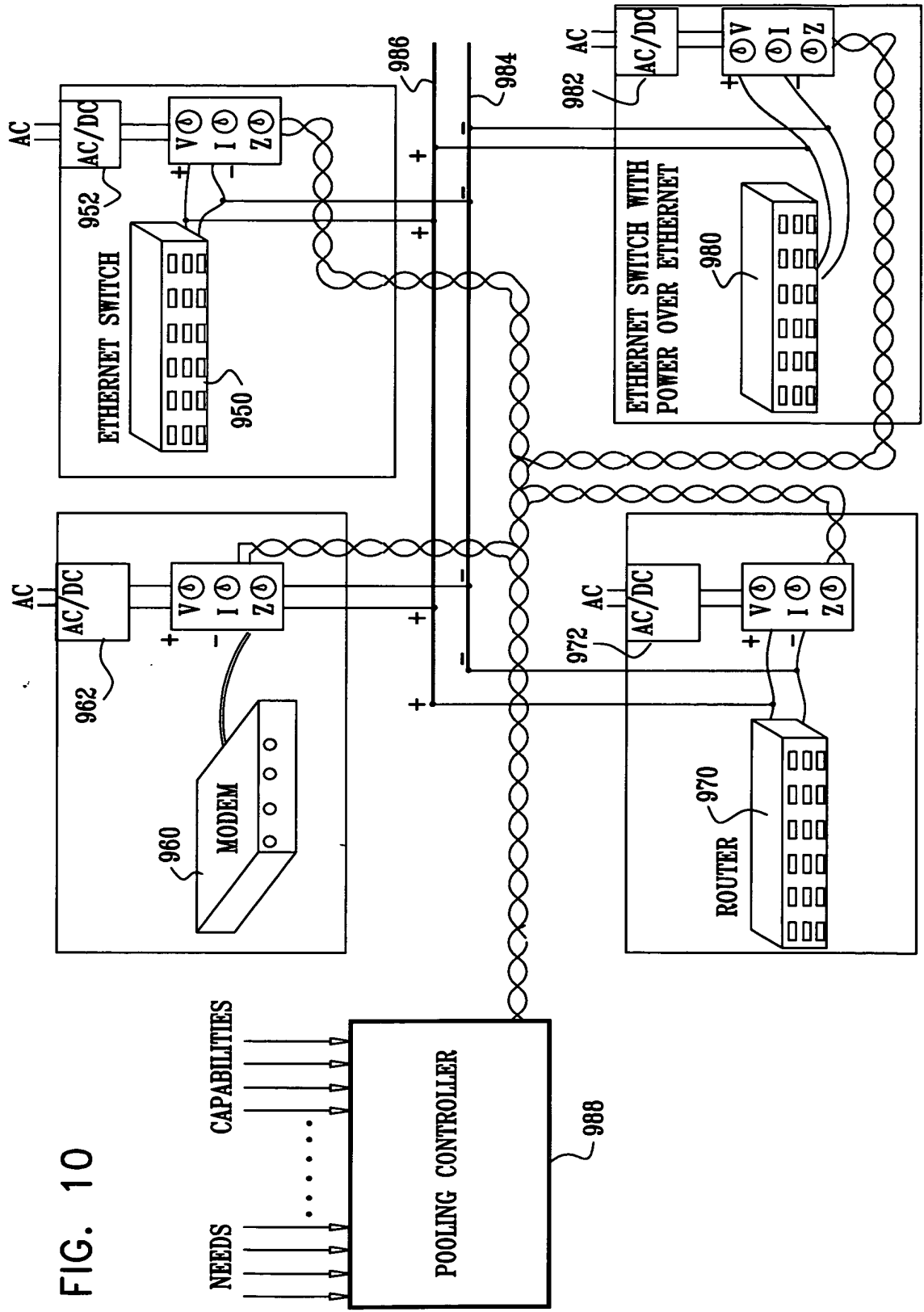


FIG. 10



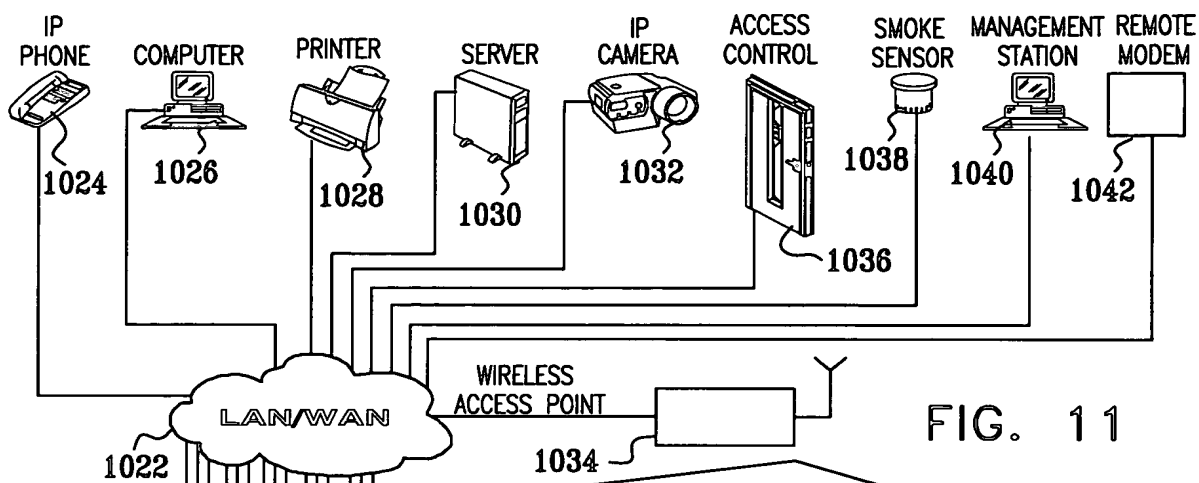
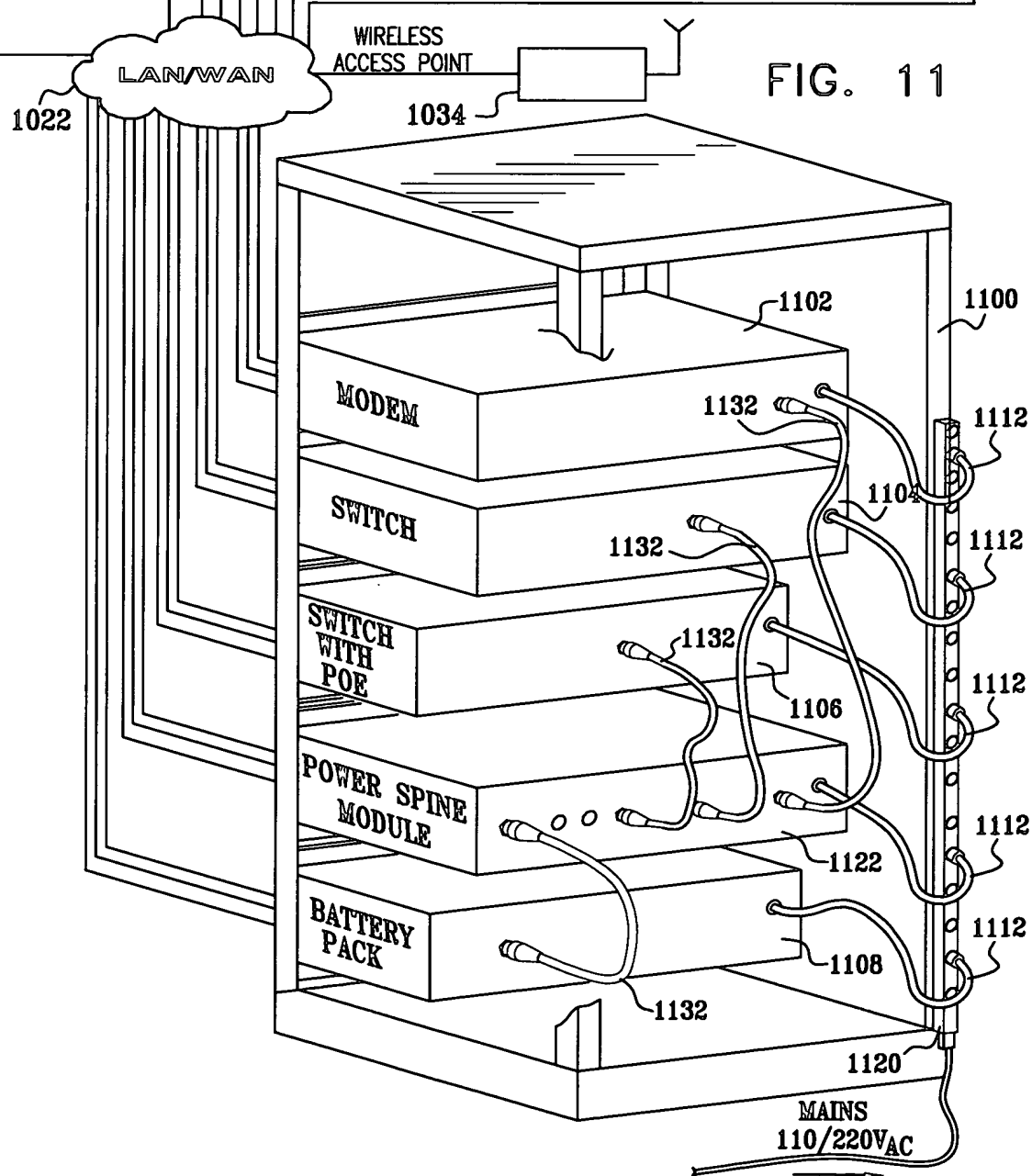
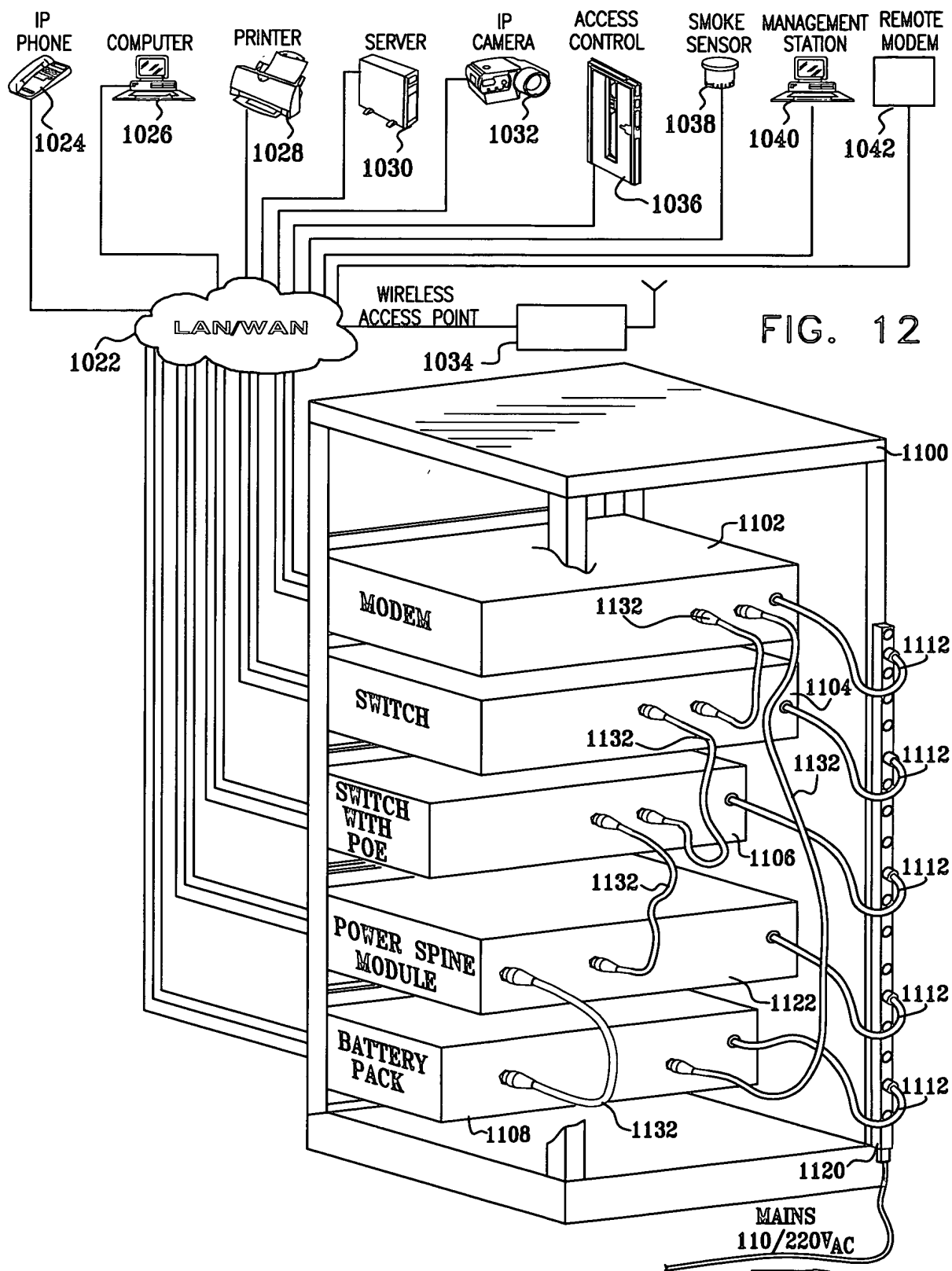


FIG. 11





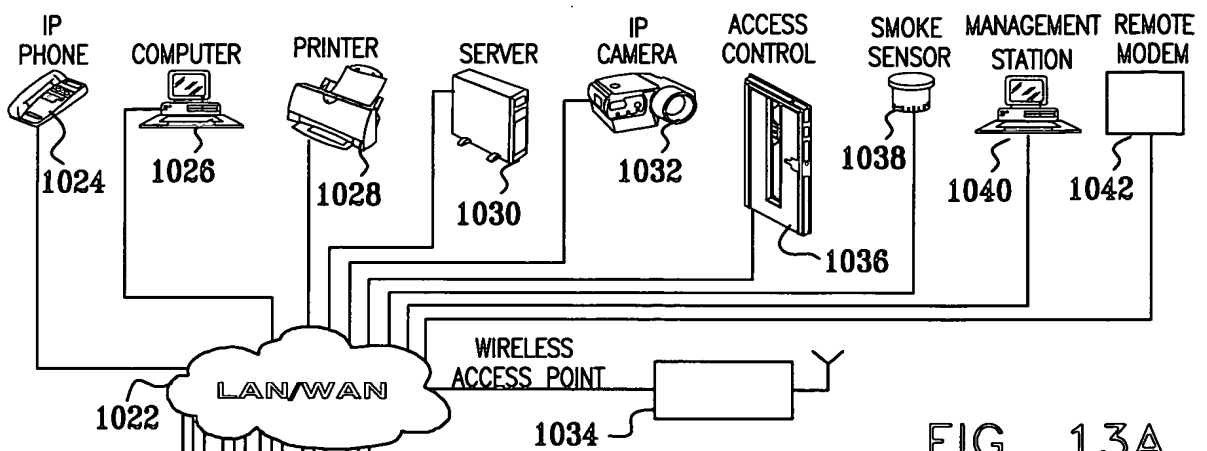
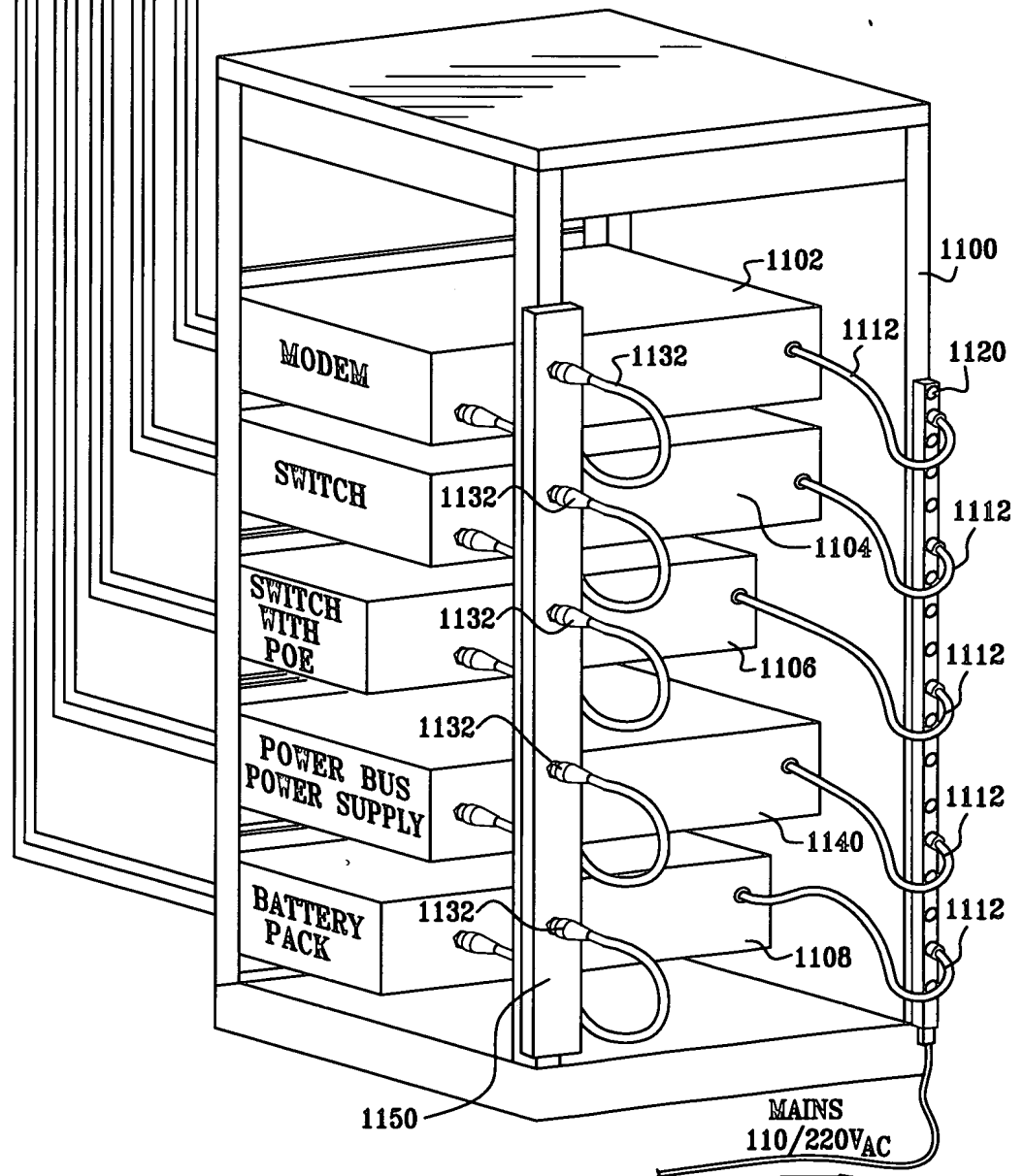


FIG. 13A



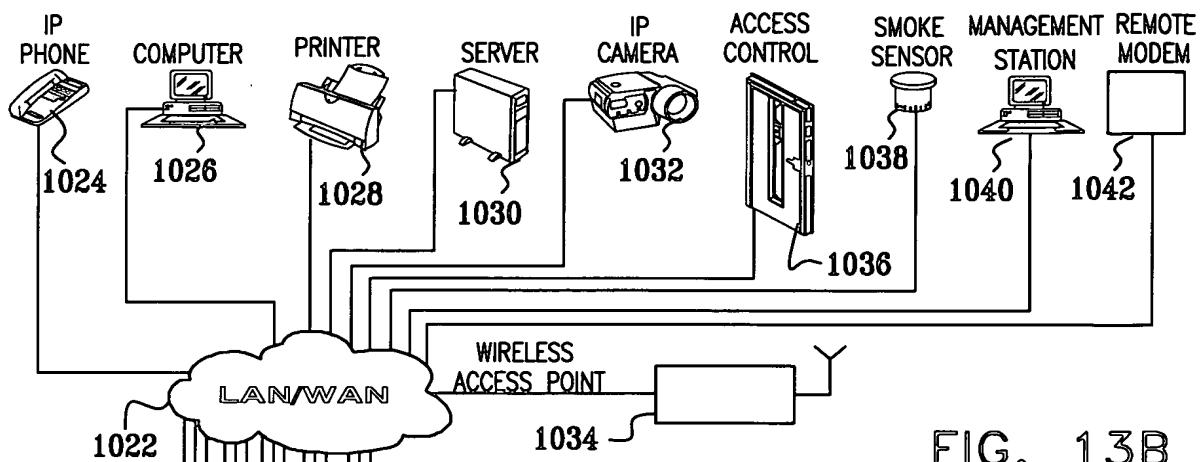
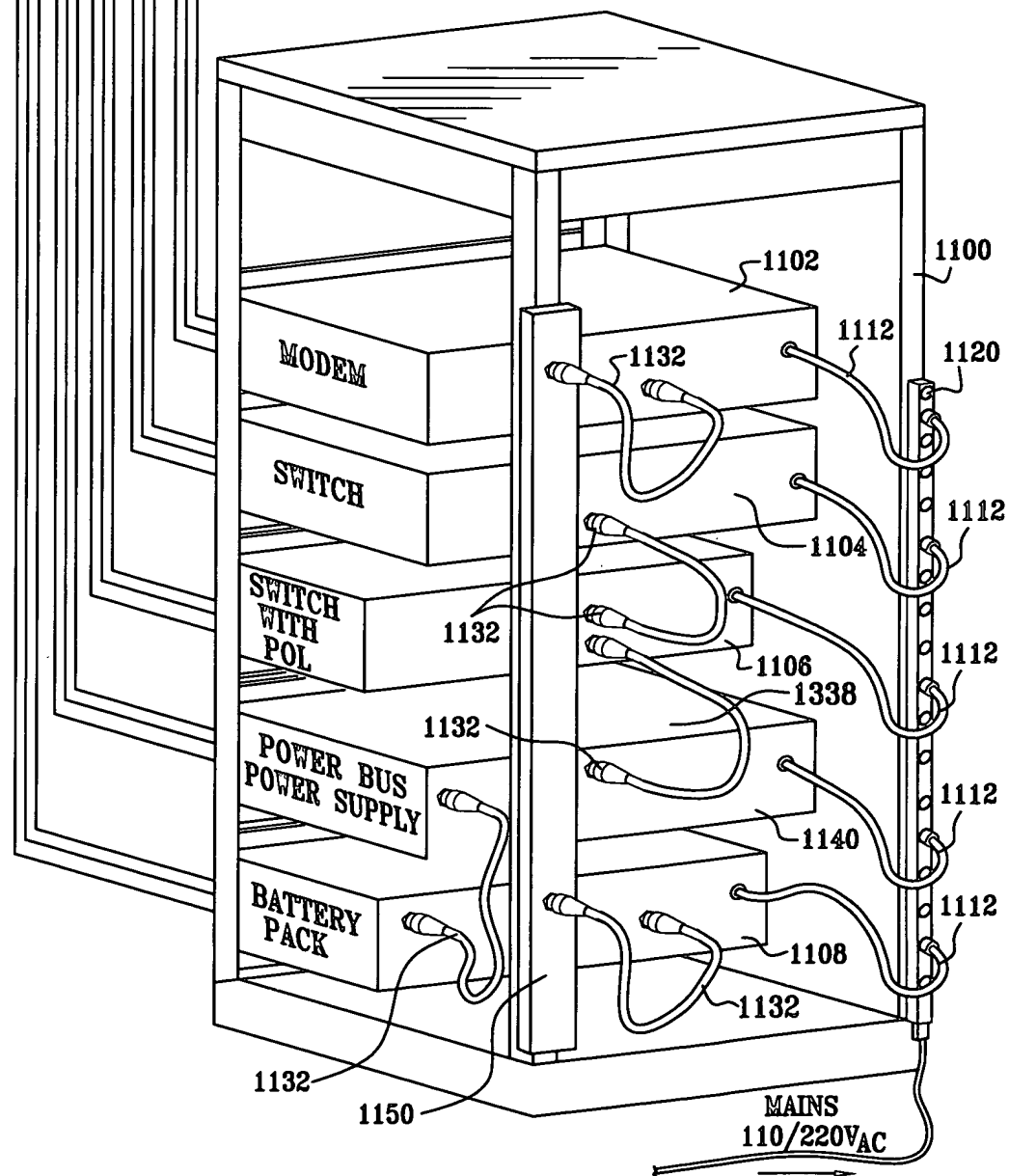
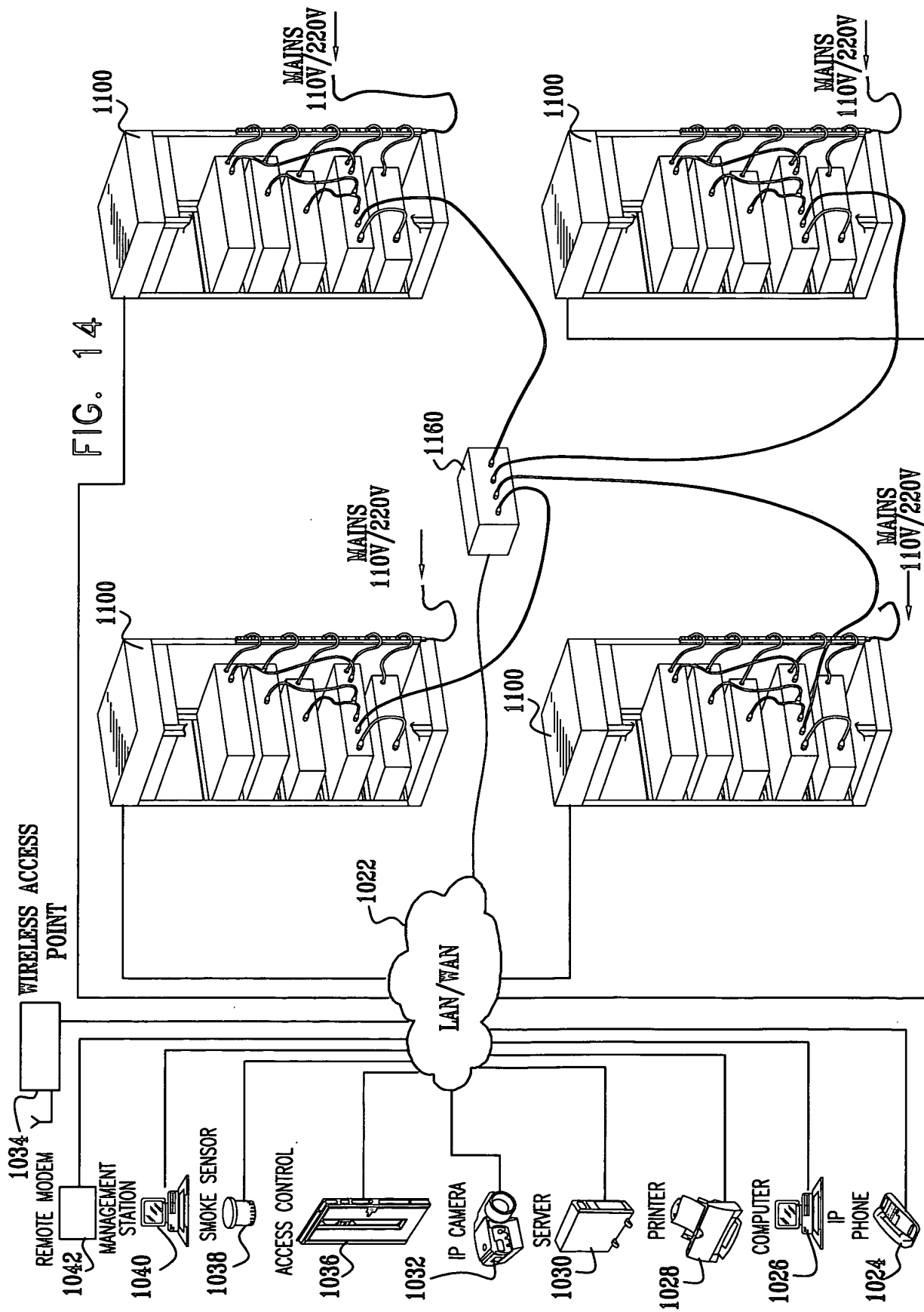
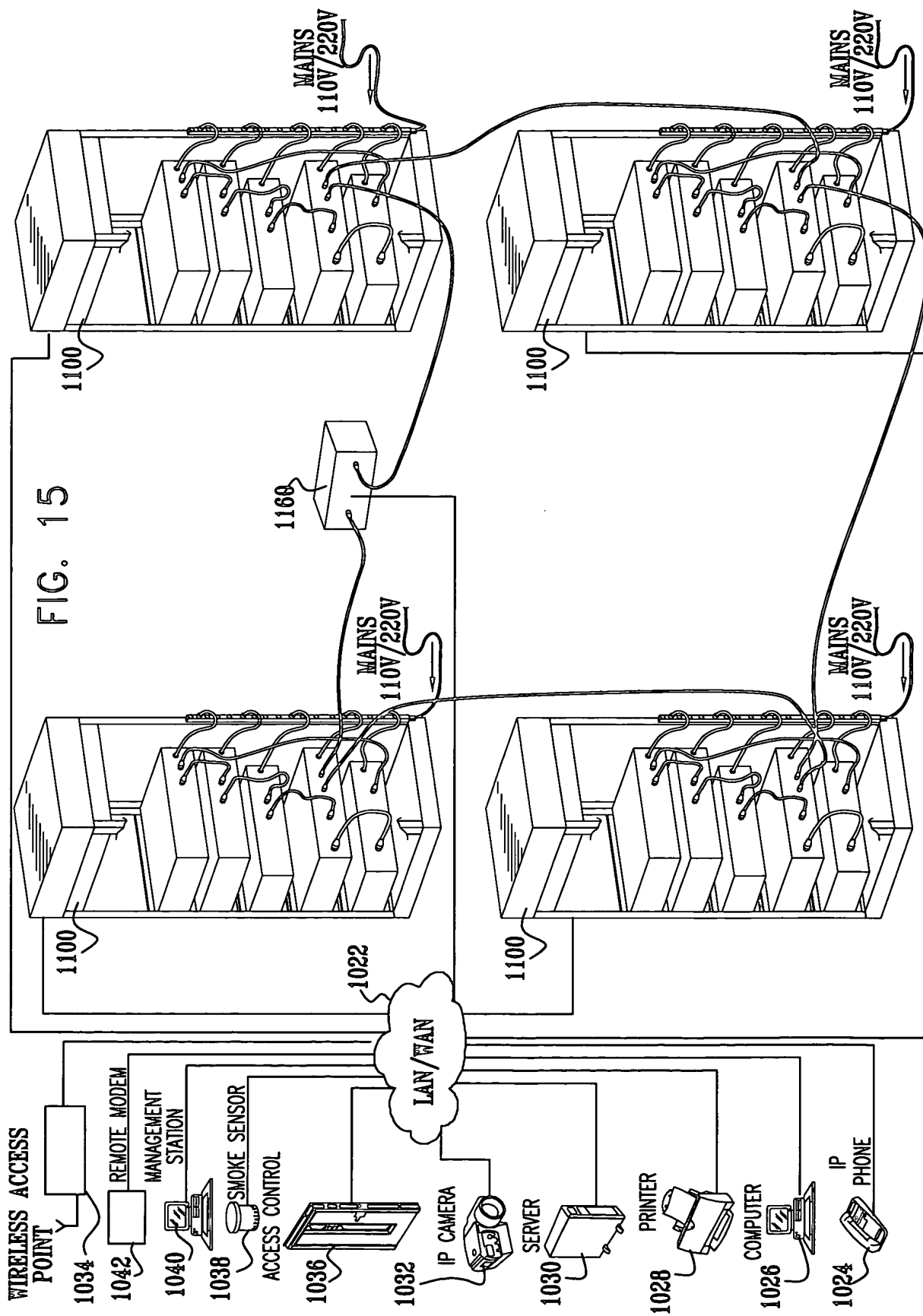


FIG. 13B







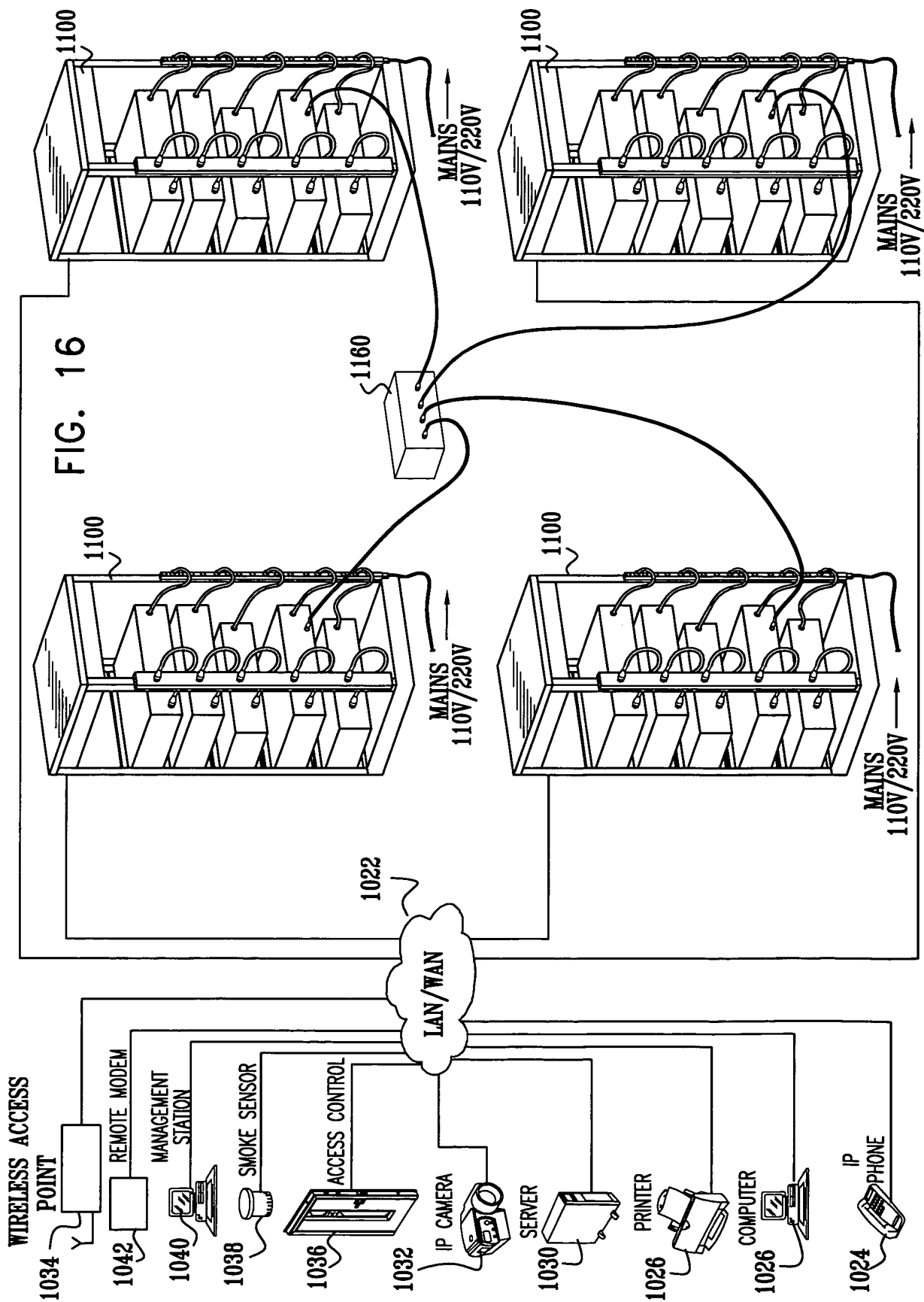


FIG. 17

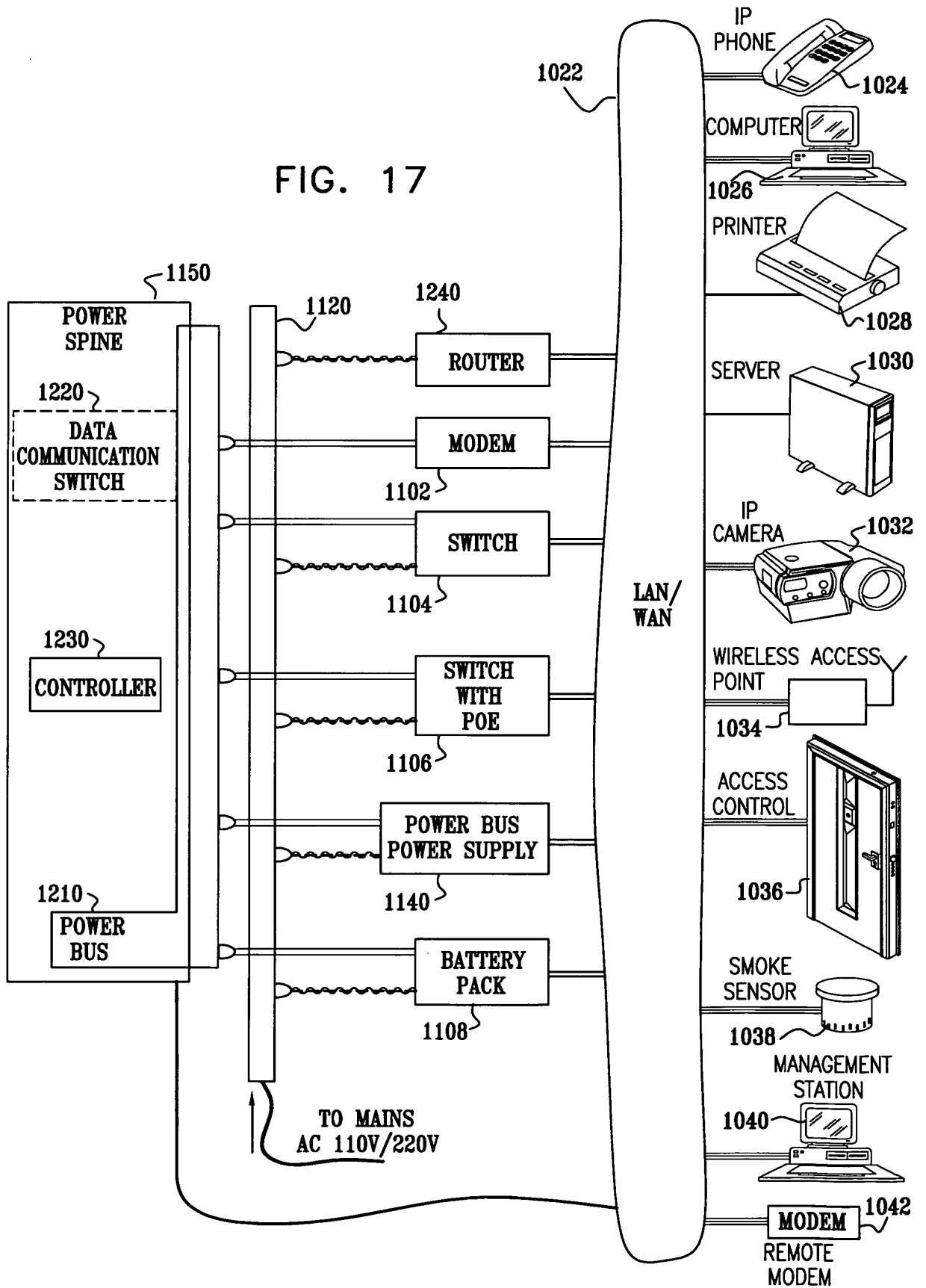


FIG. 18A

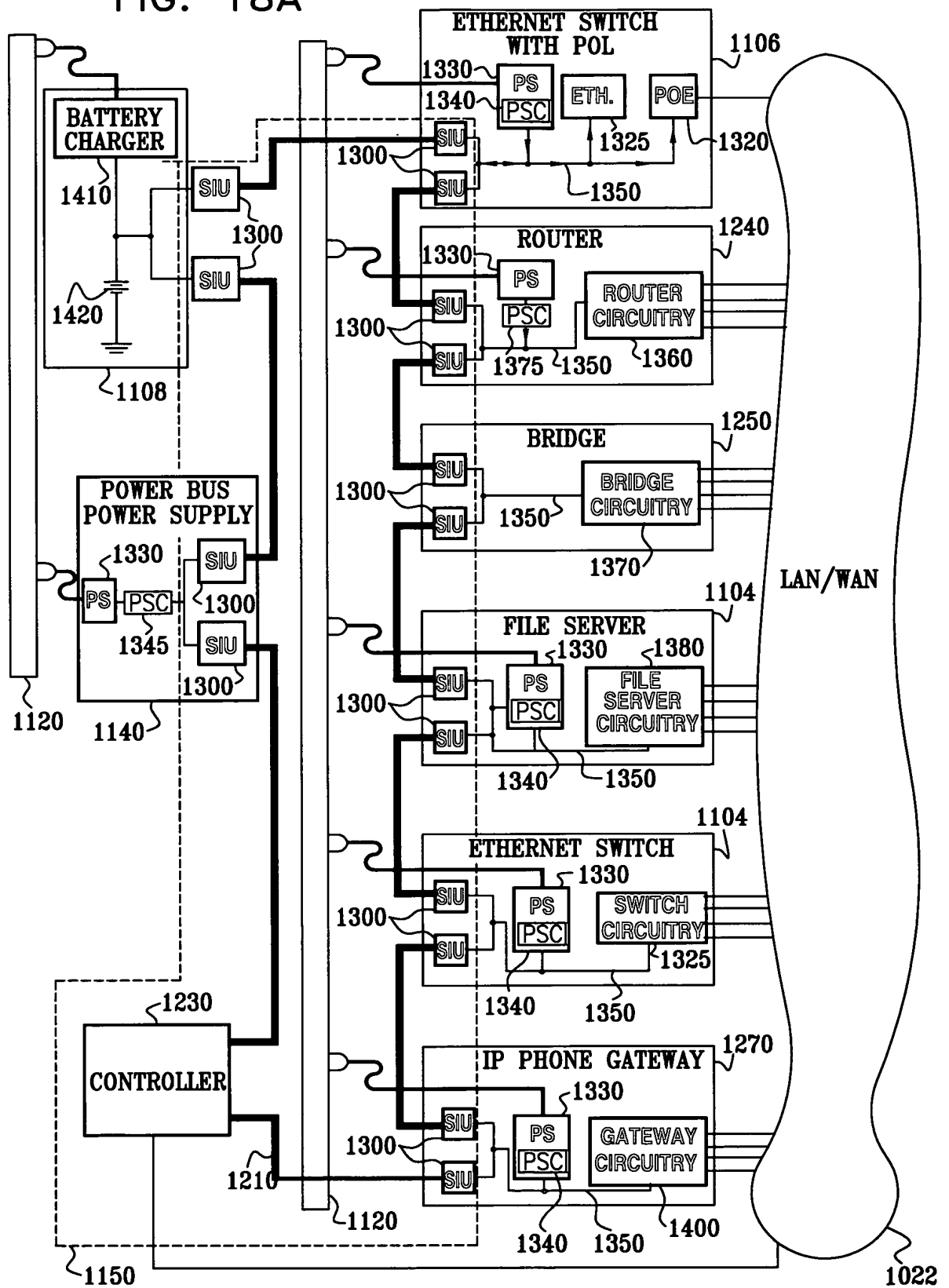


FIG. 18B

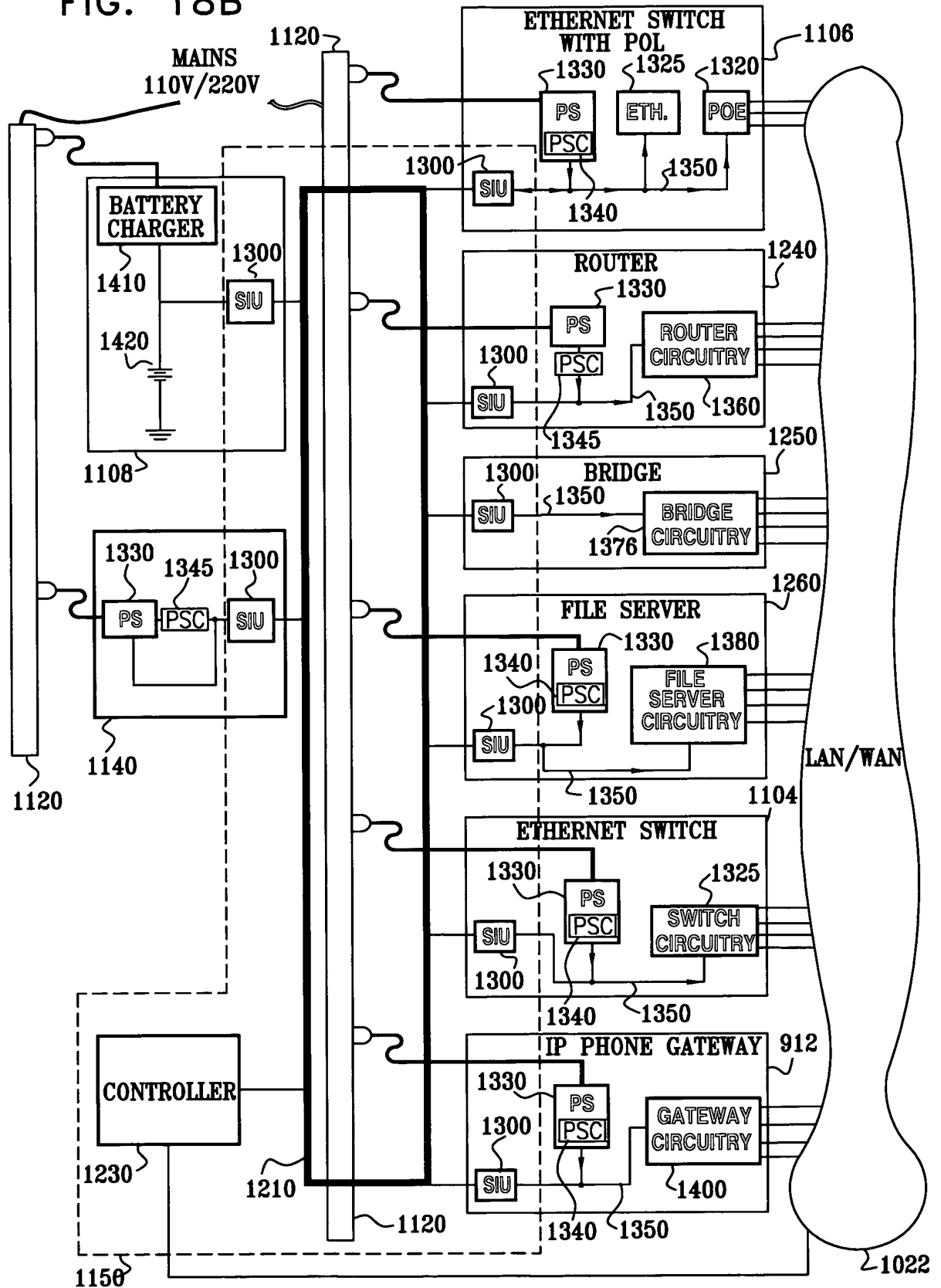


FIG. 19A

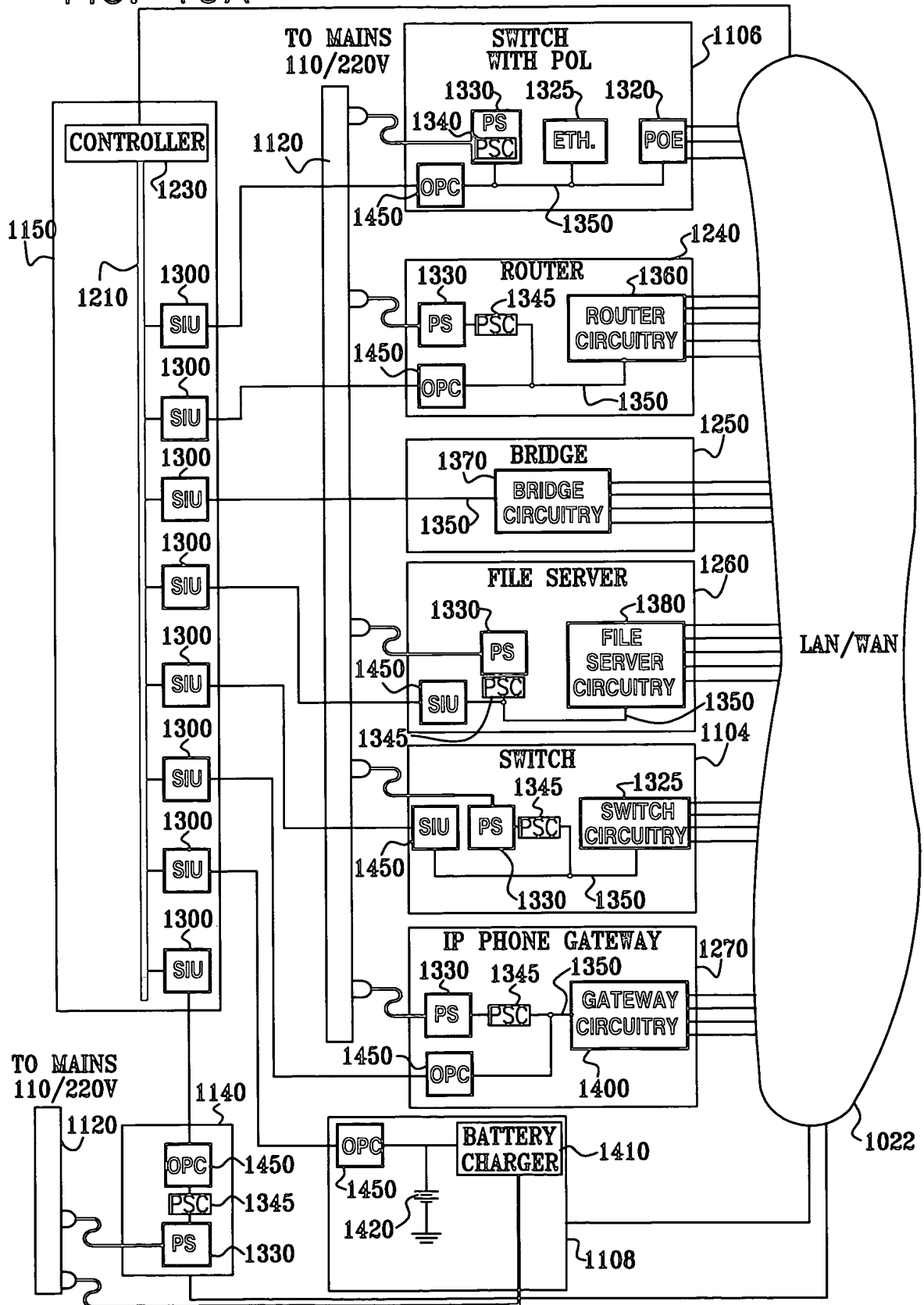


FIG. 19B

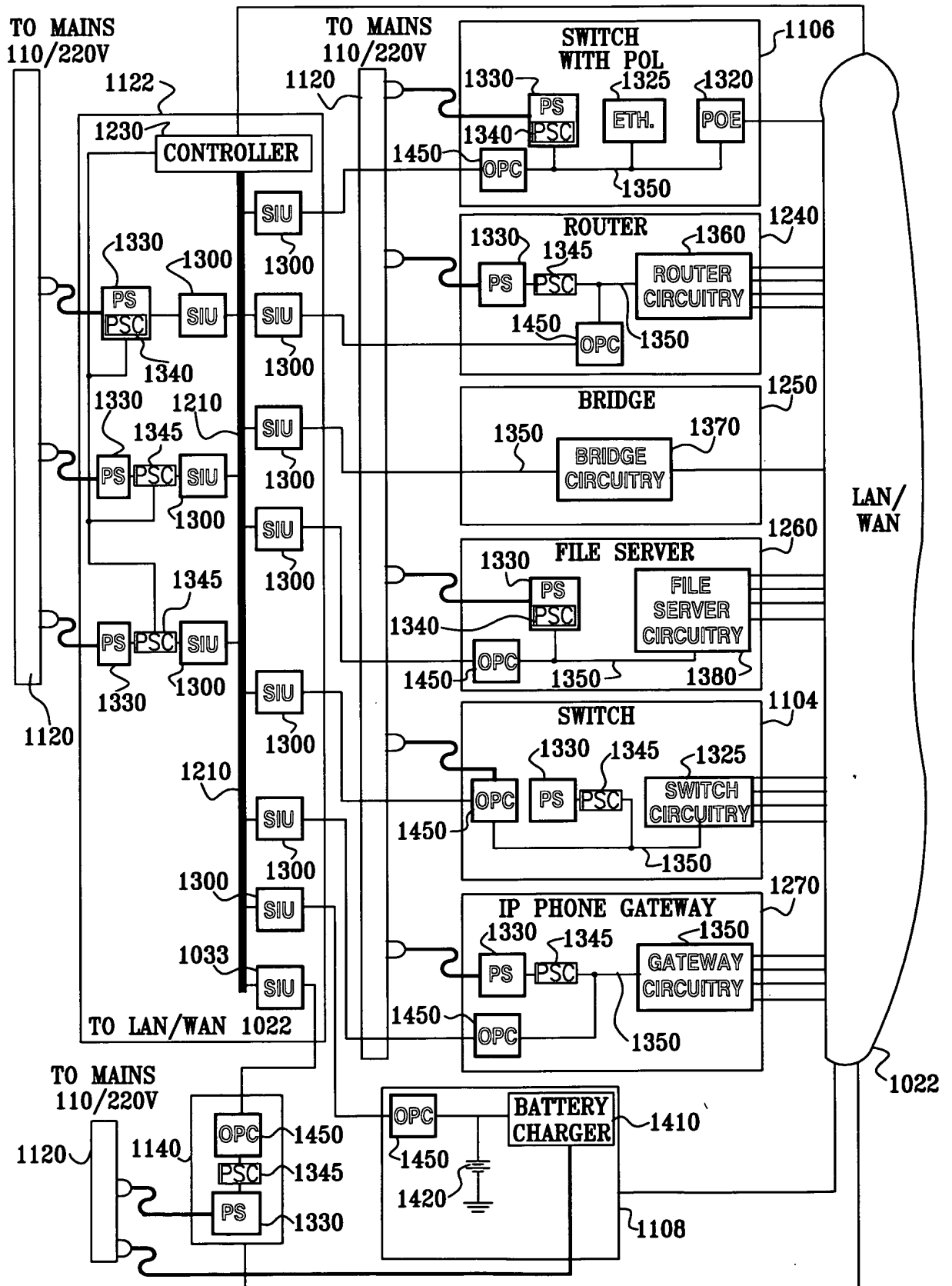


FIG. 20A

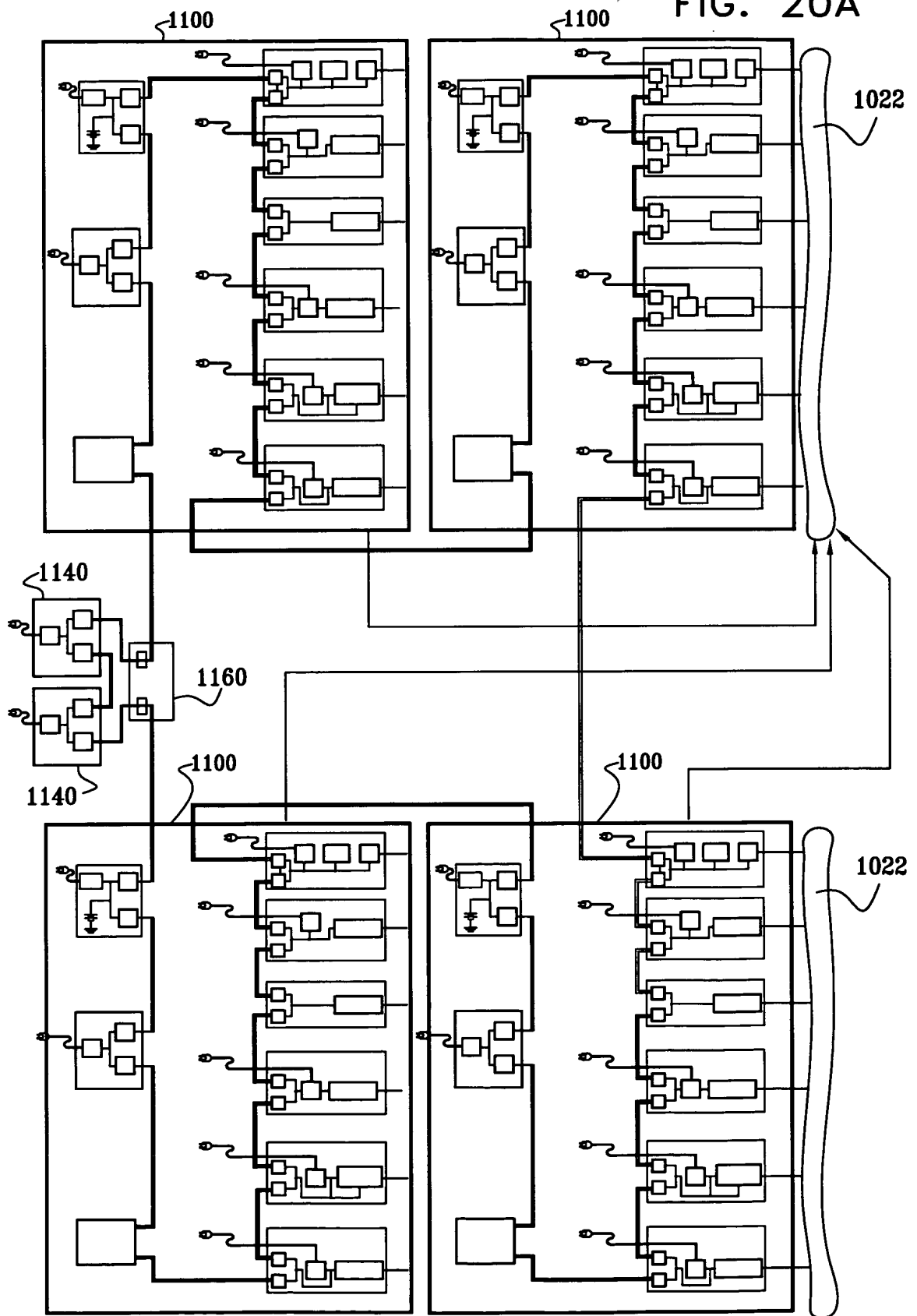


FIG. 20B

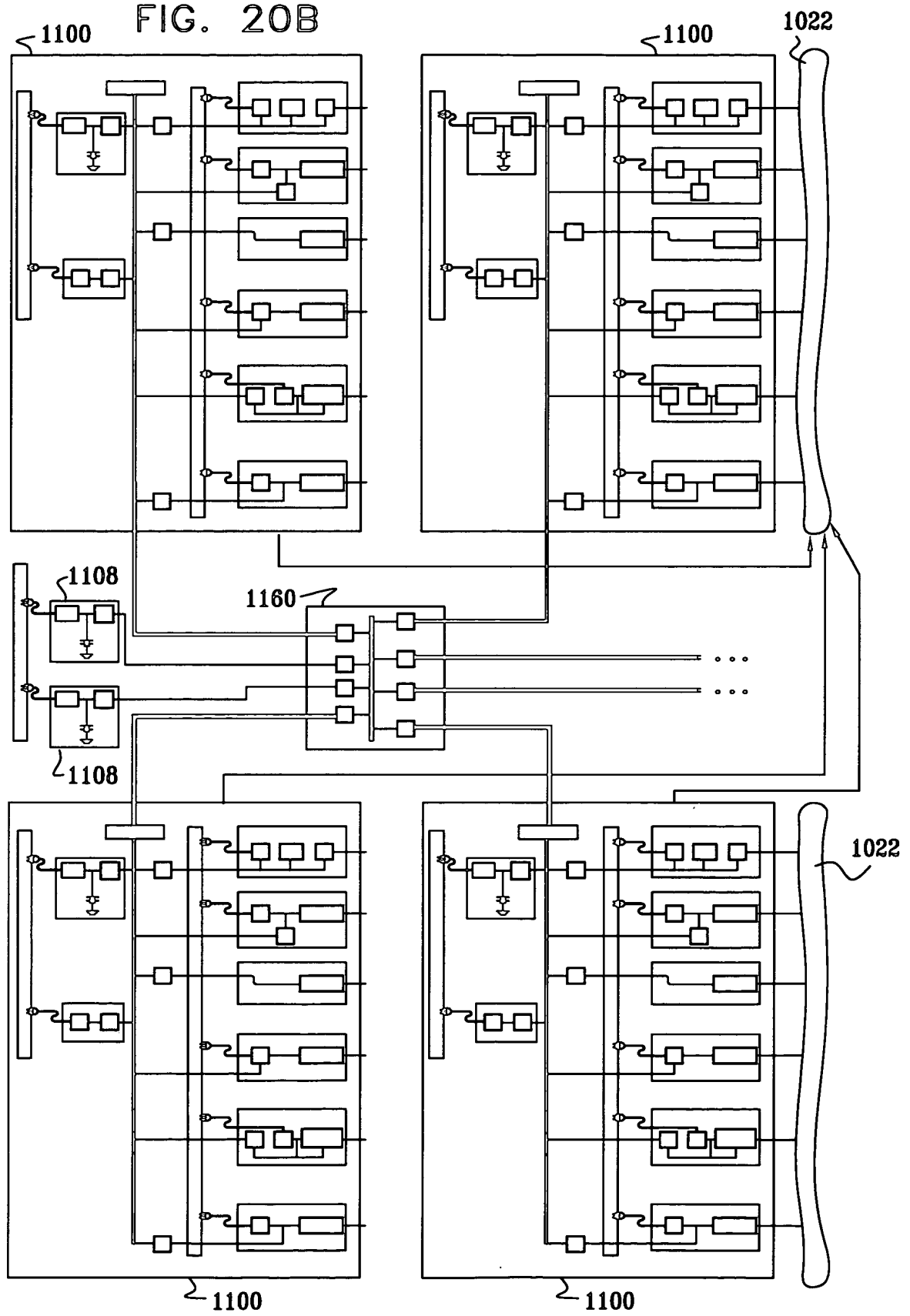


FIG. 21A

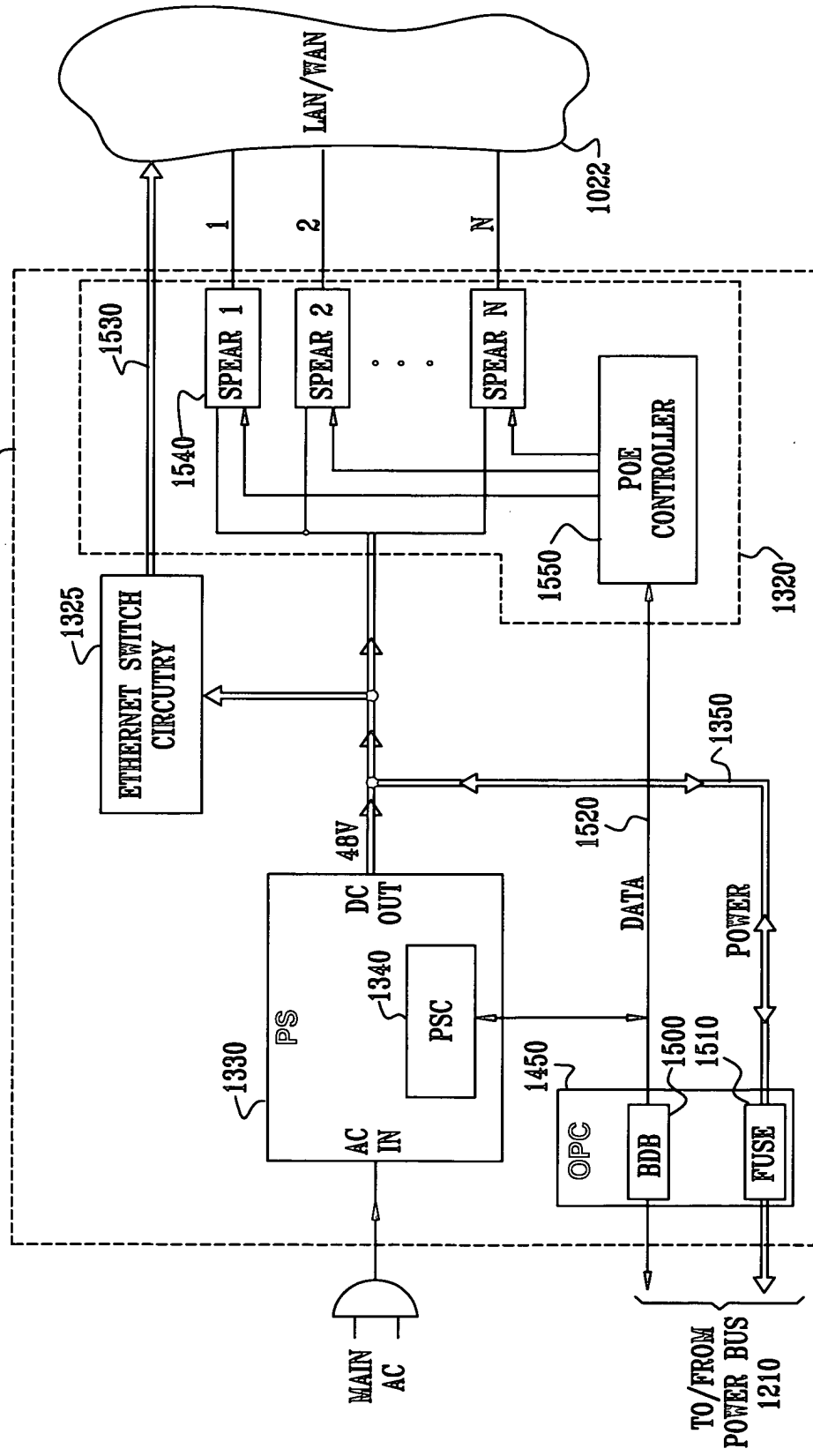


FIG. 21B

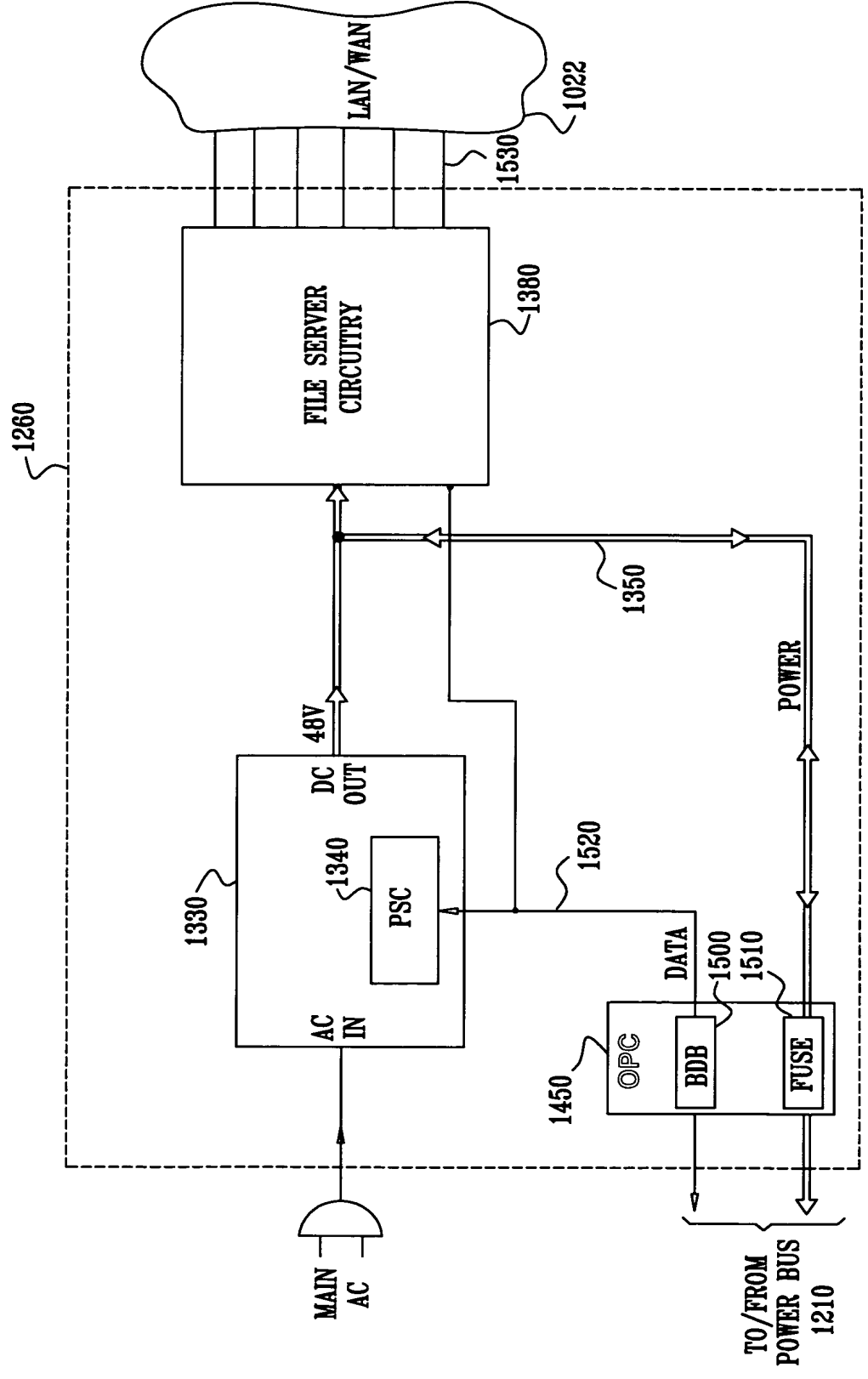


FIG. 21C

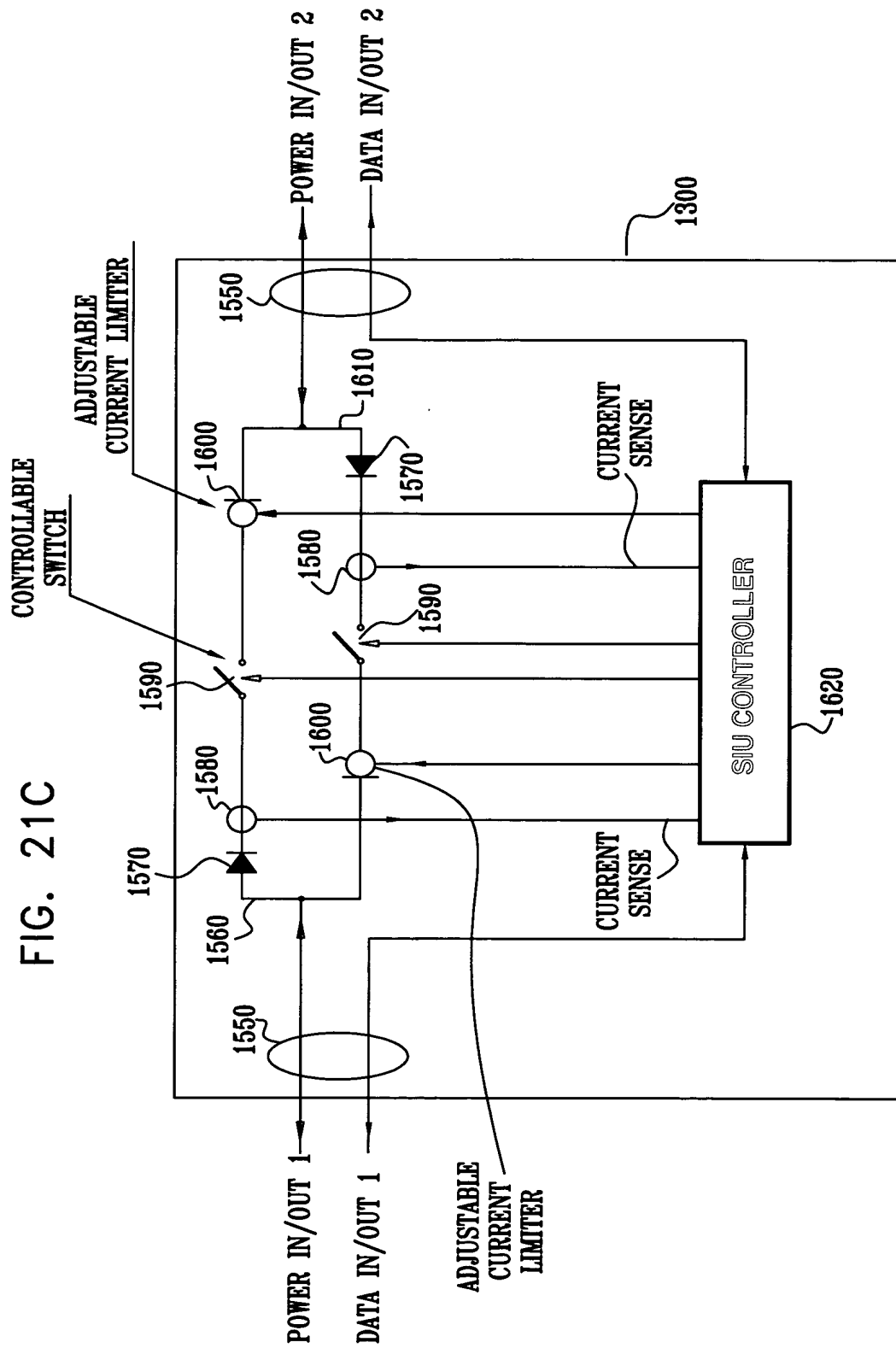


FIG. 21D

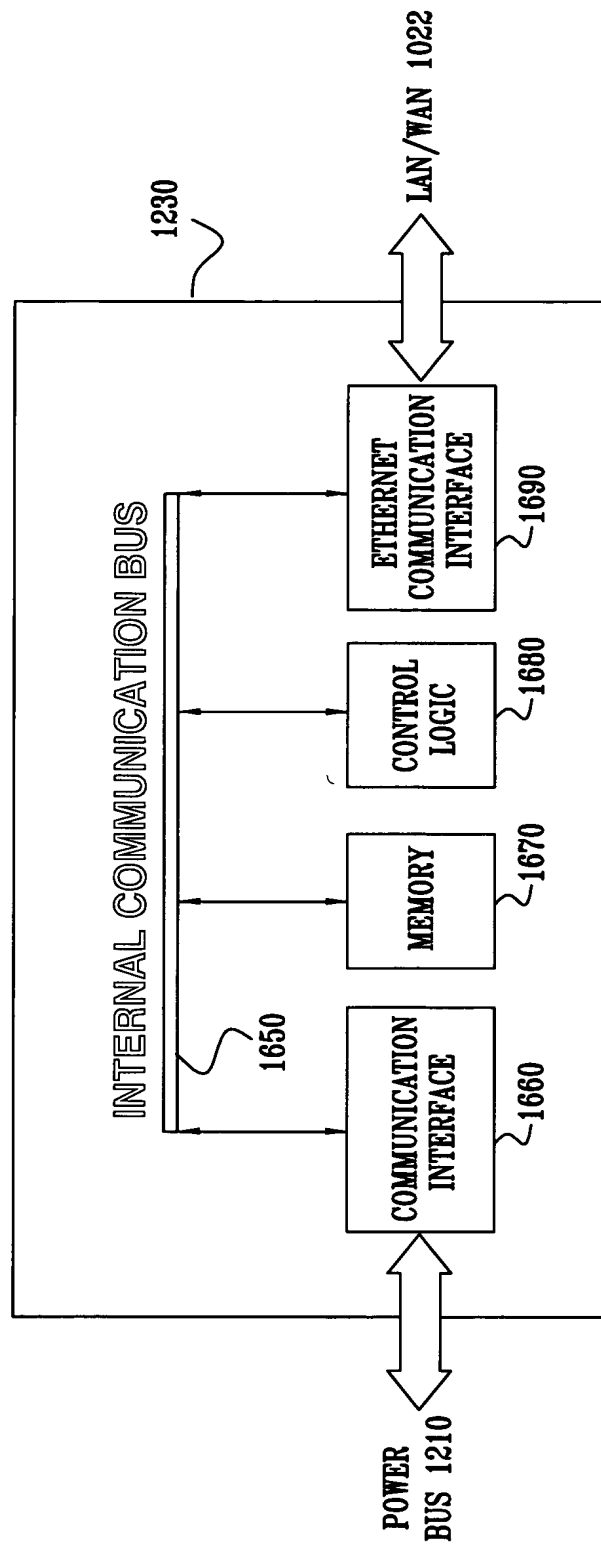


FIG. 21E

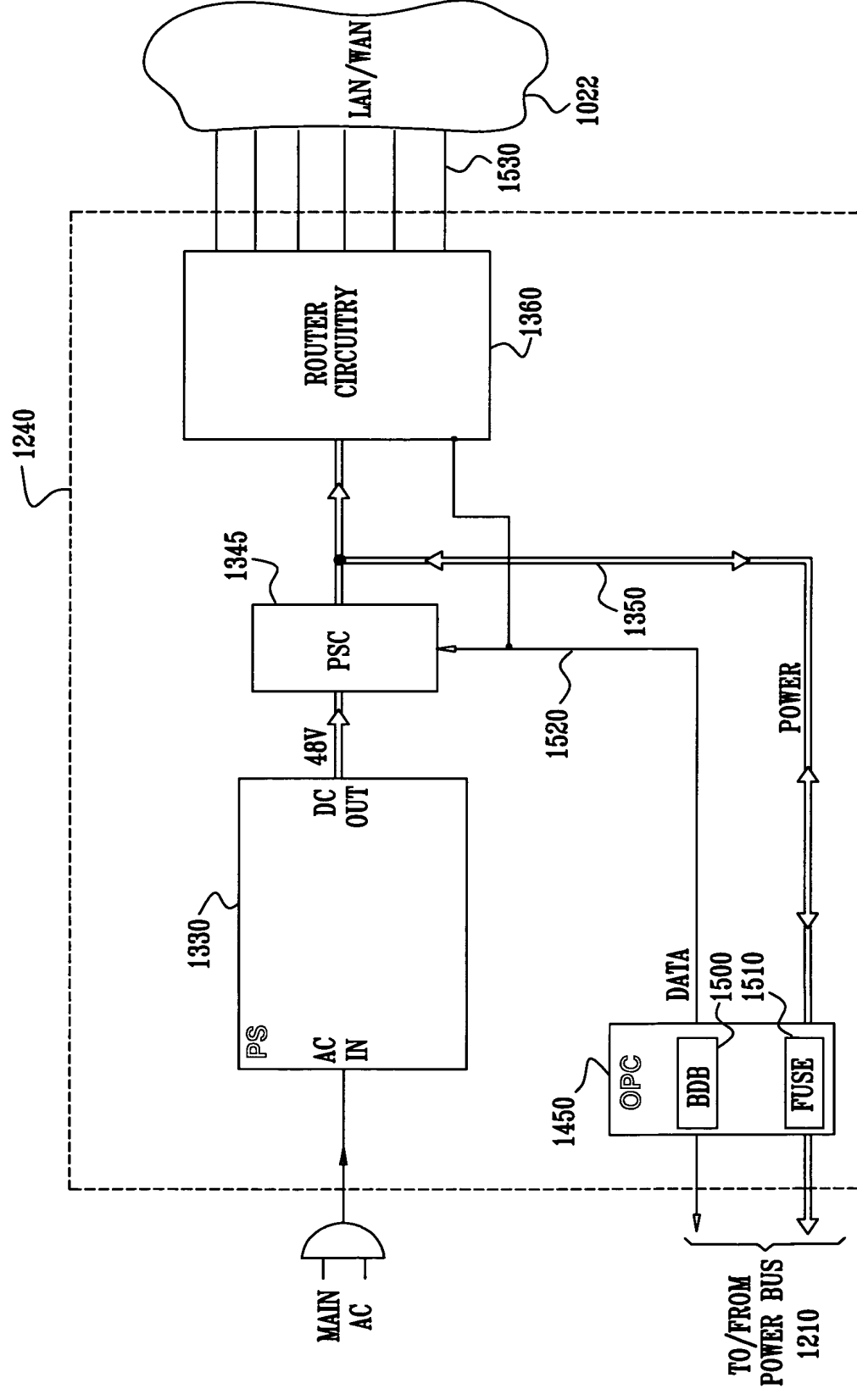


FIG. 21F

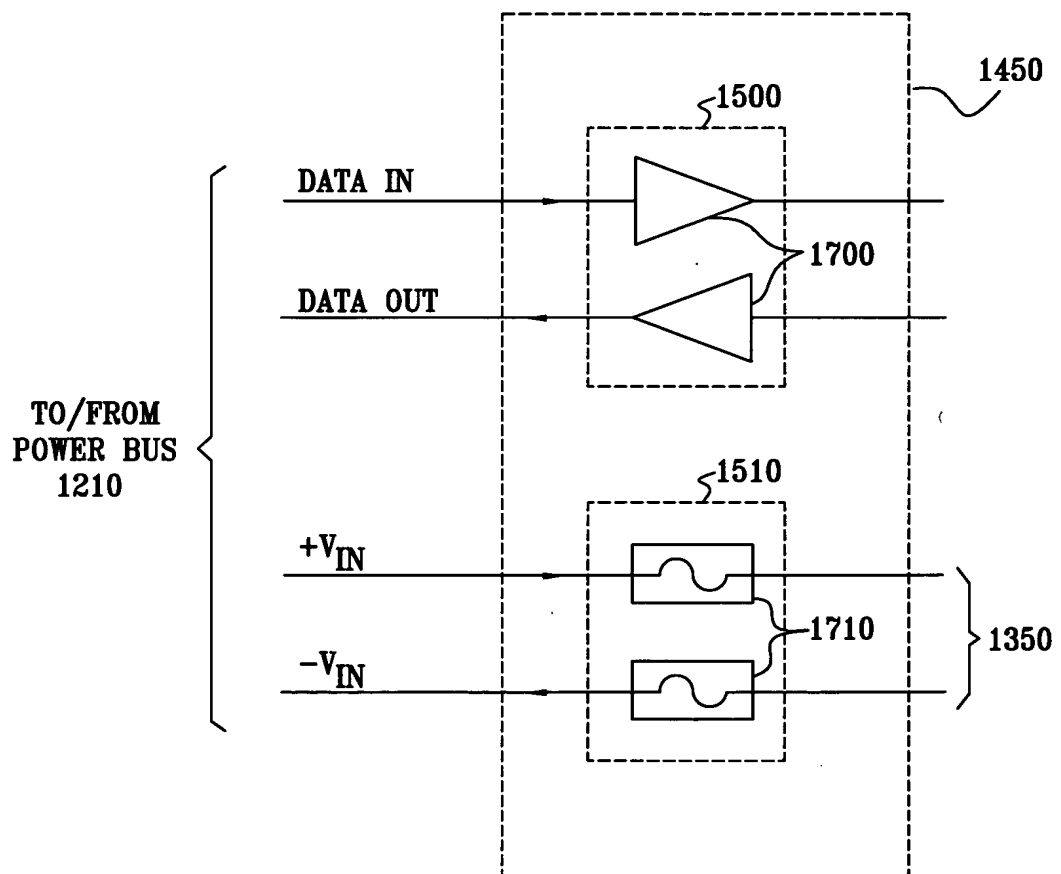


FIG. 22A

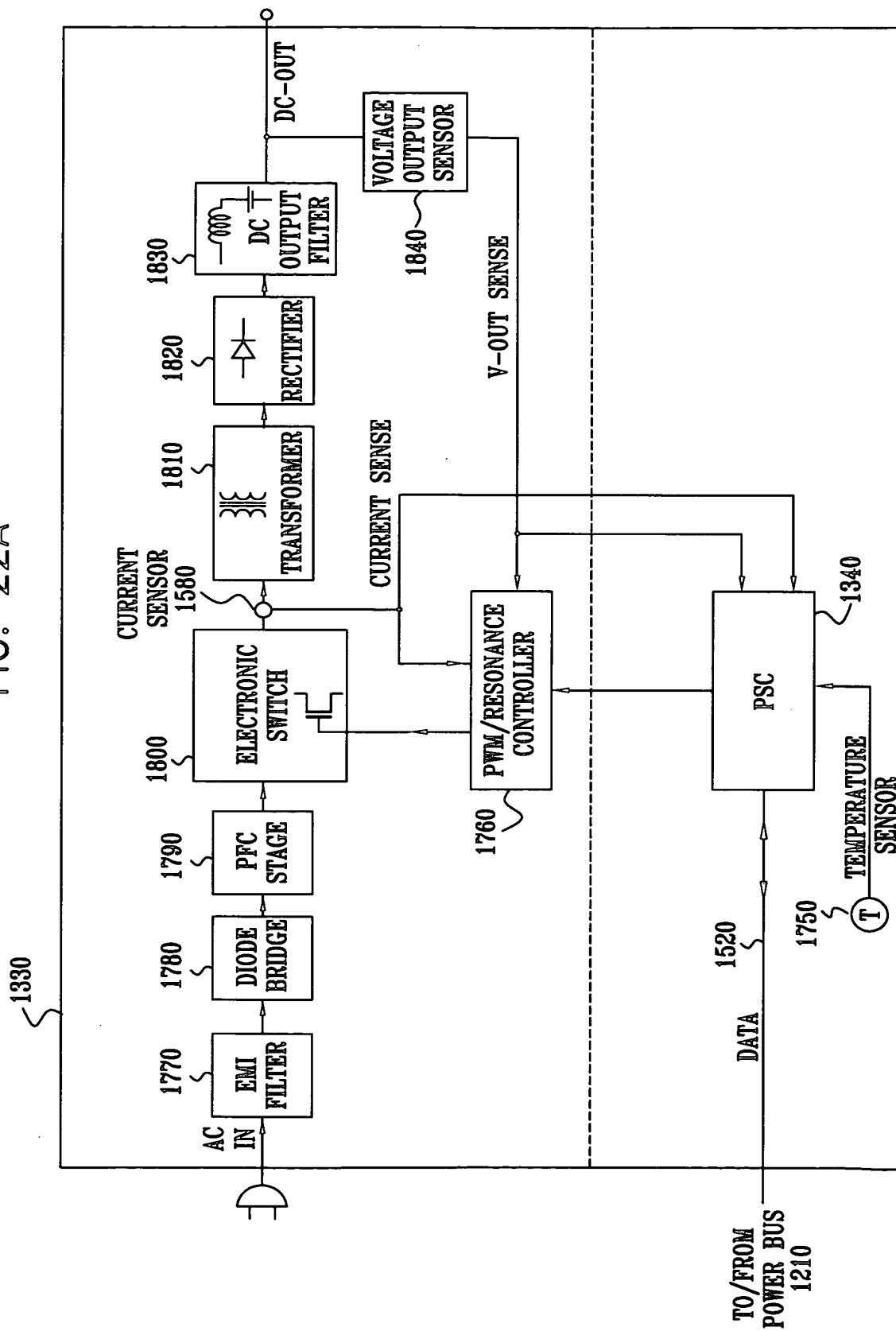


FIG. 22B

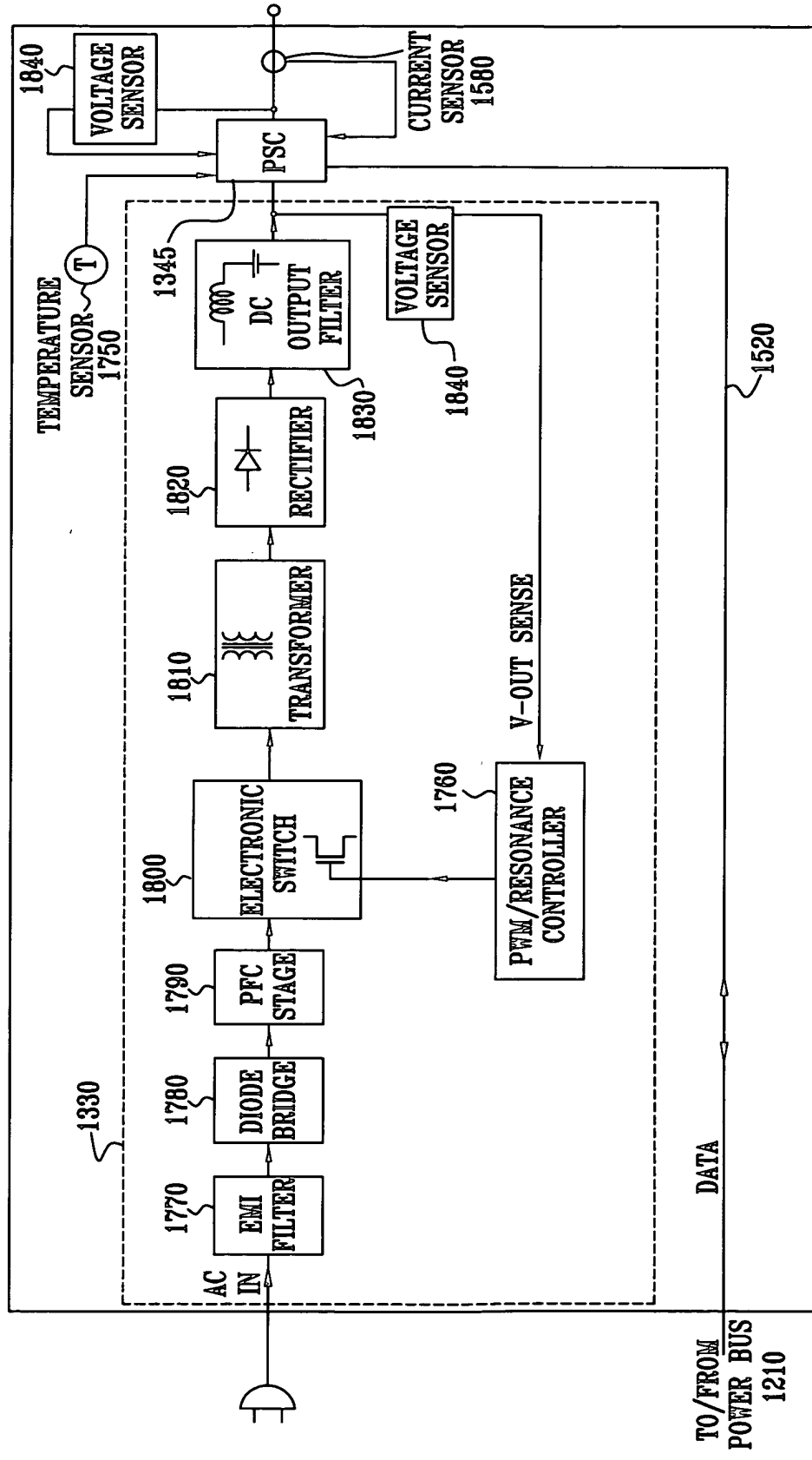


FIG. 23A

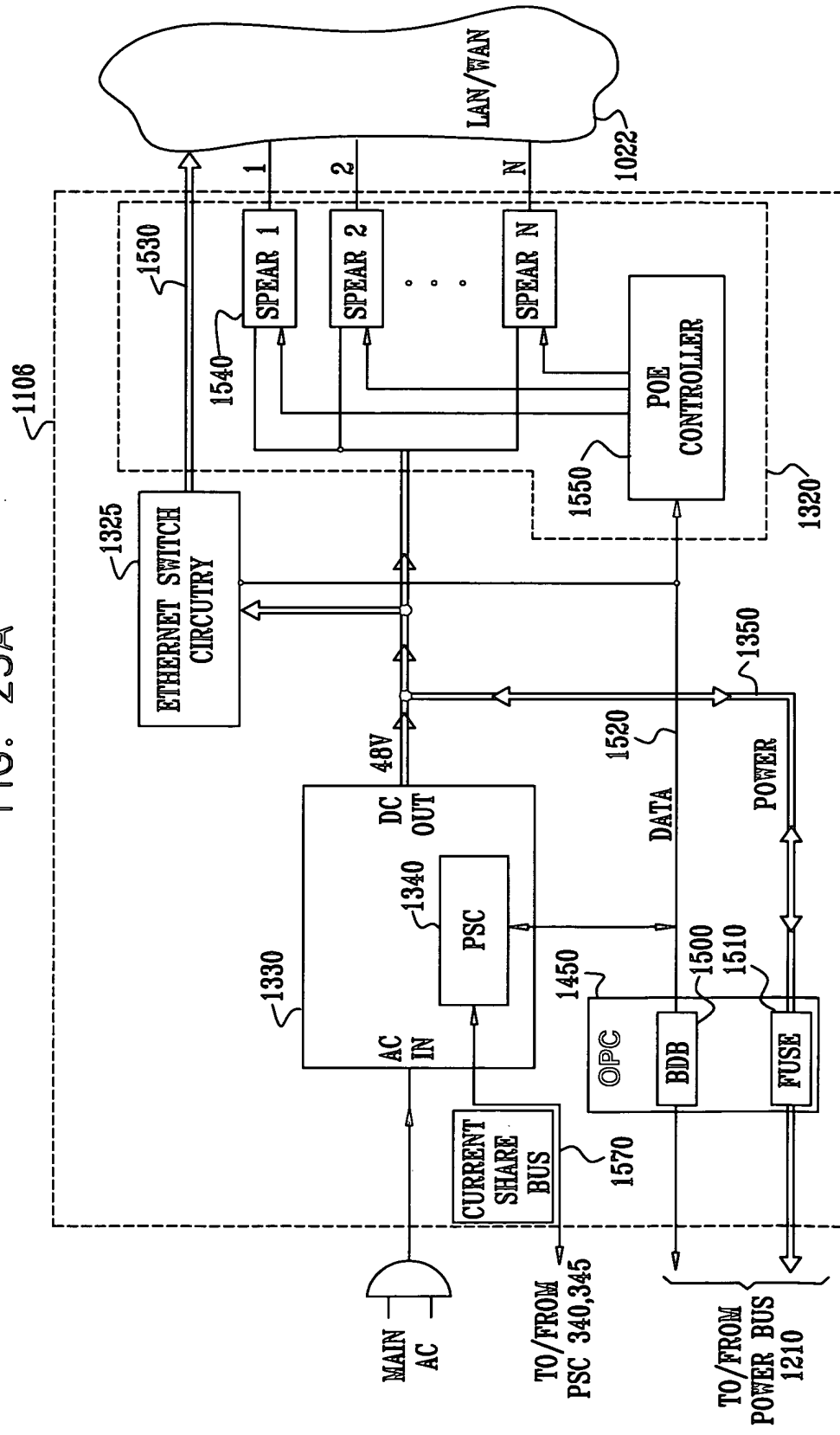


FIG. 23B

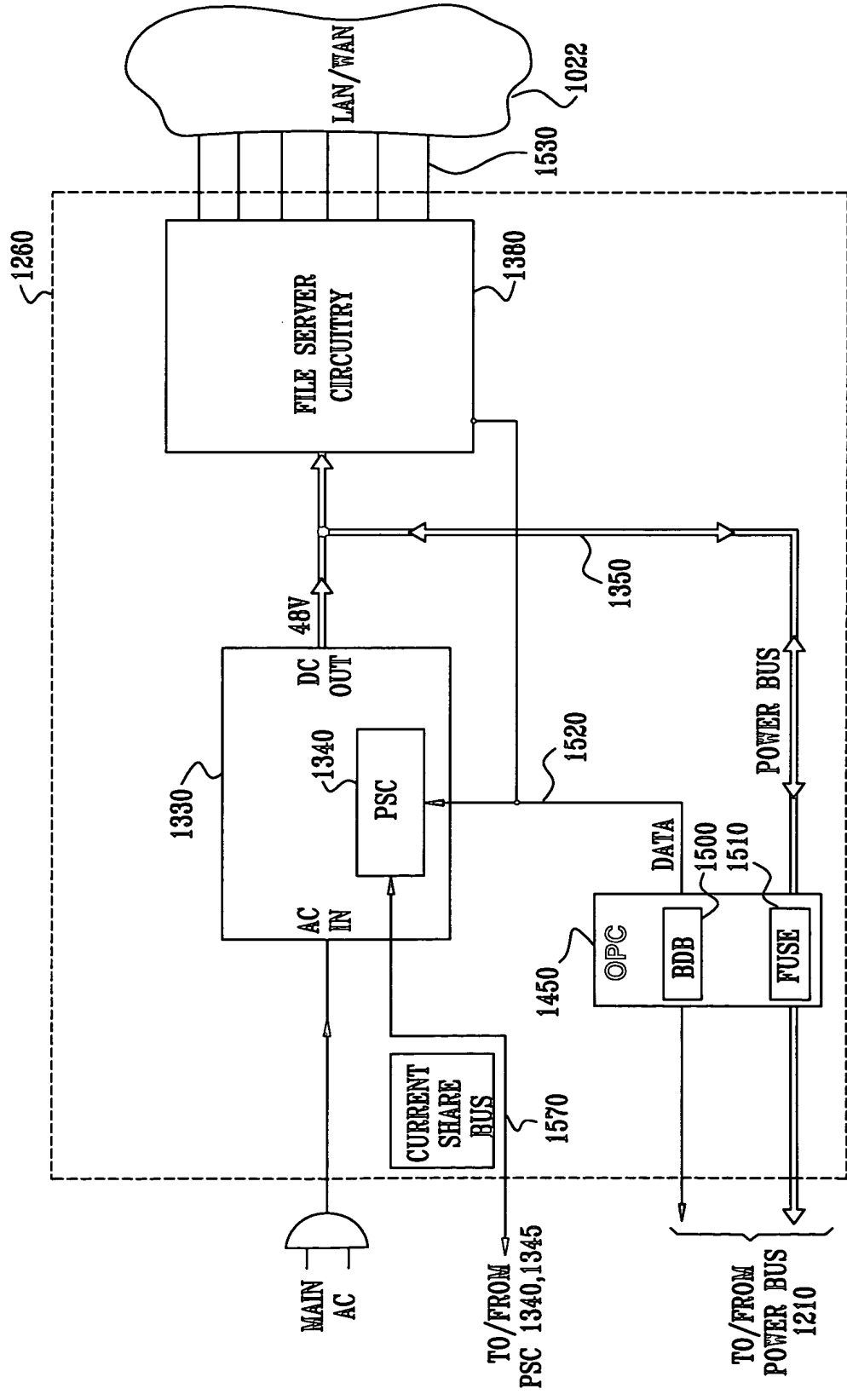


FIG. 23C

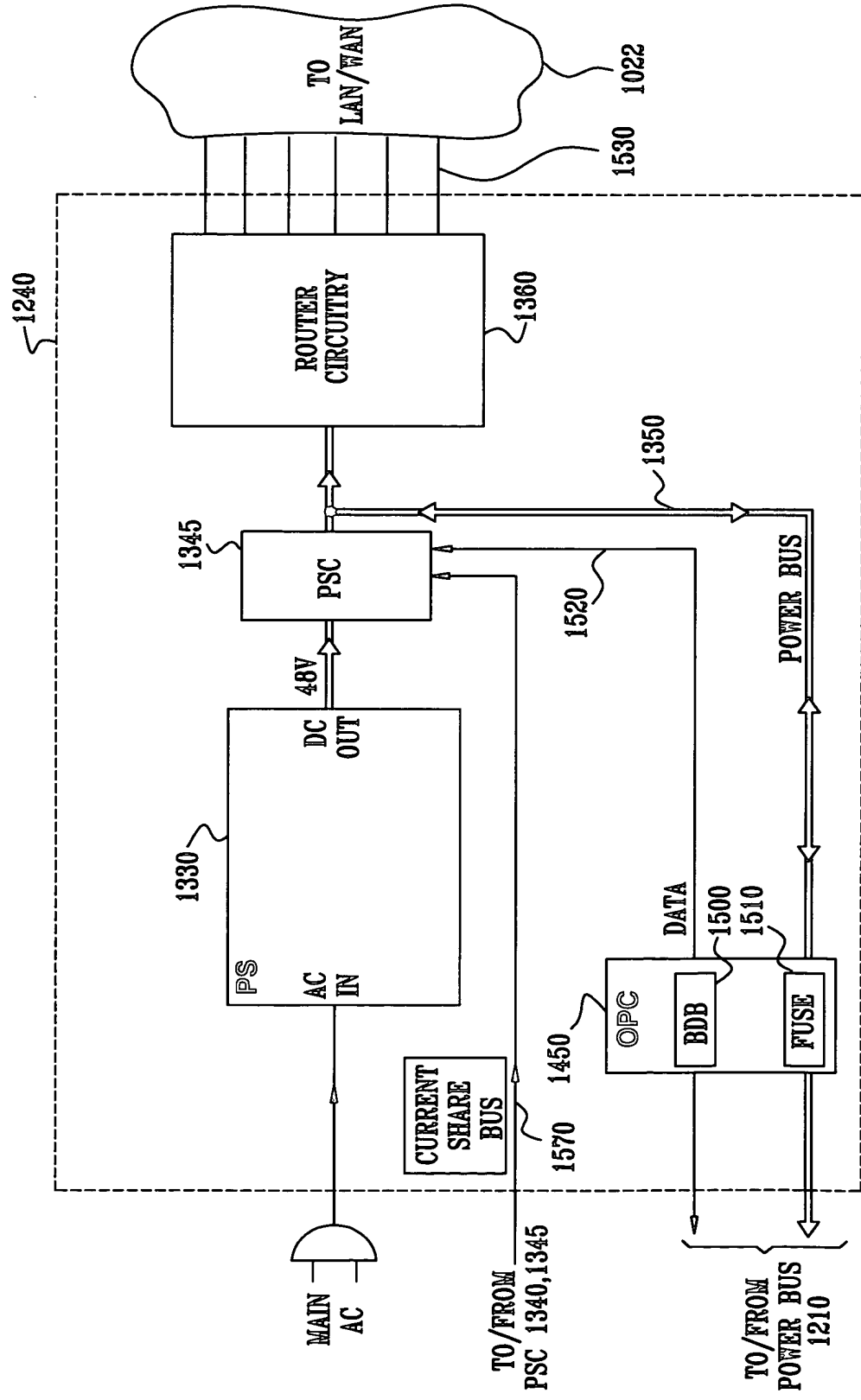


FIG. 24A

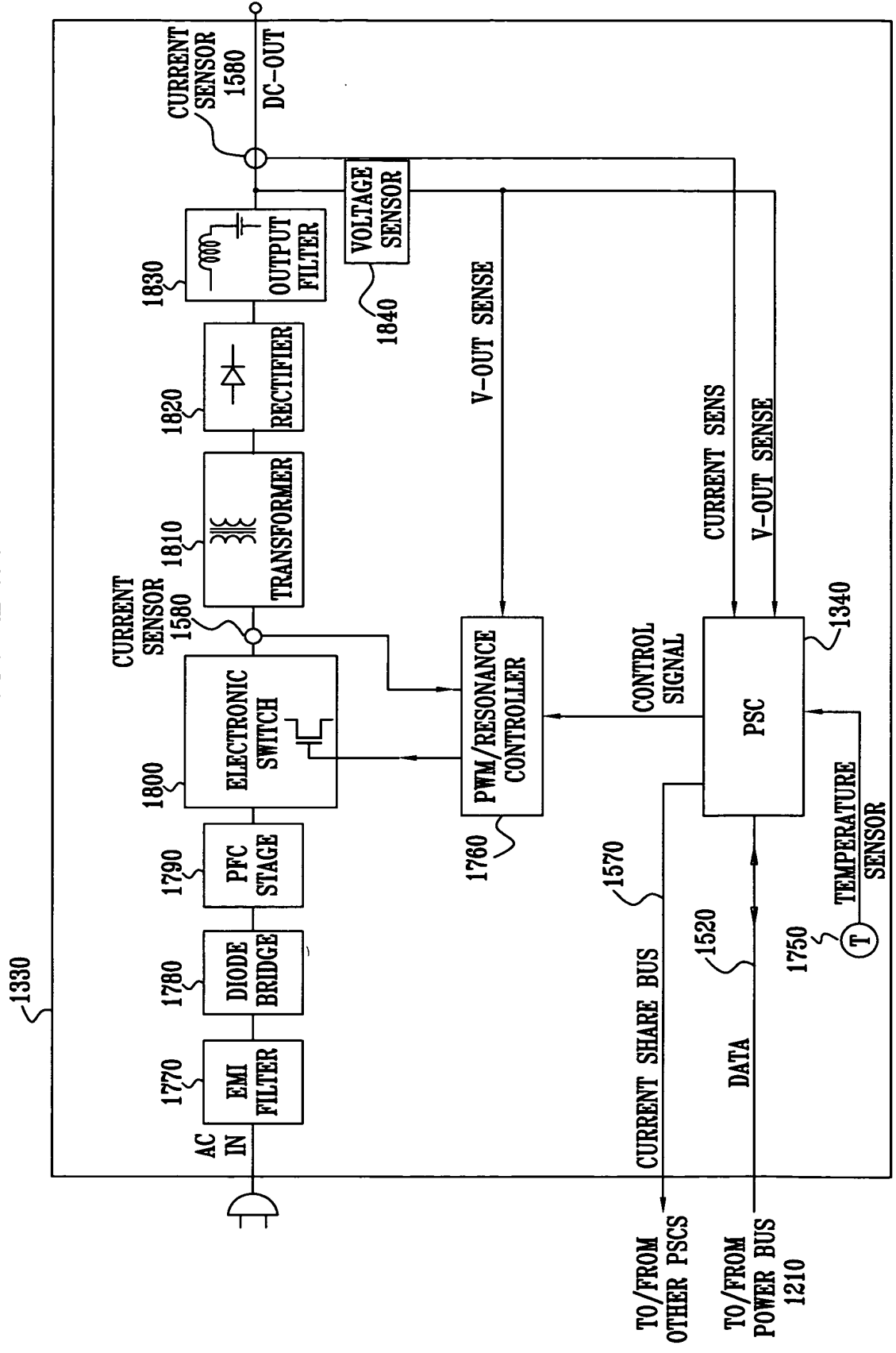
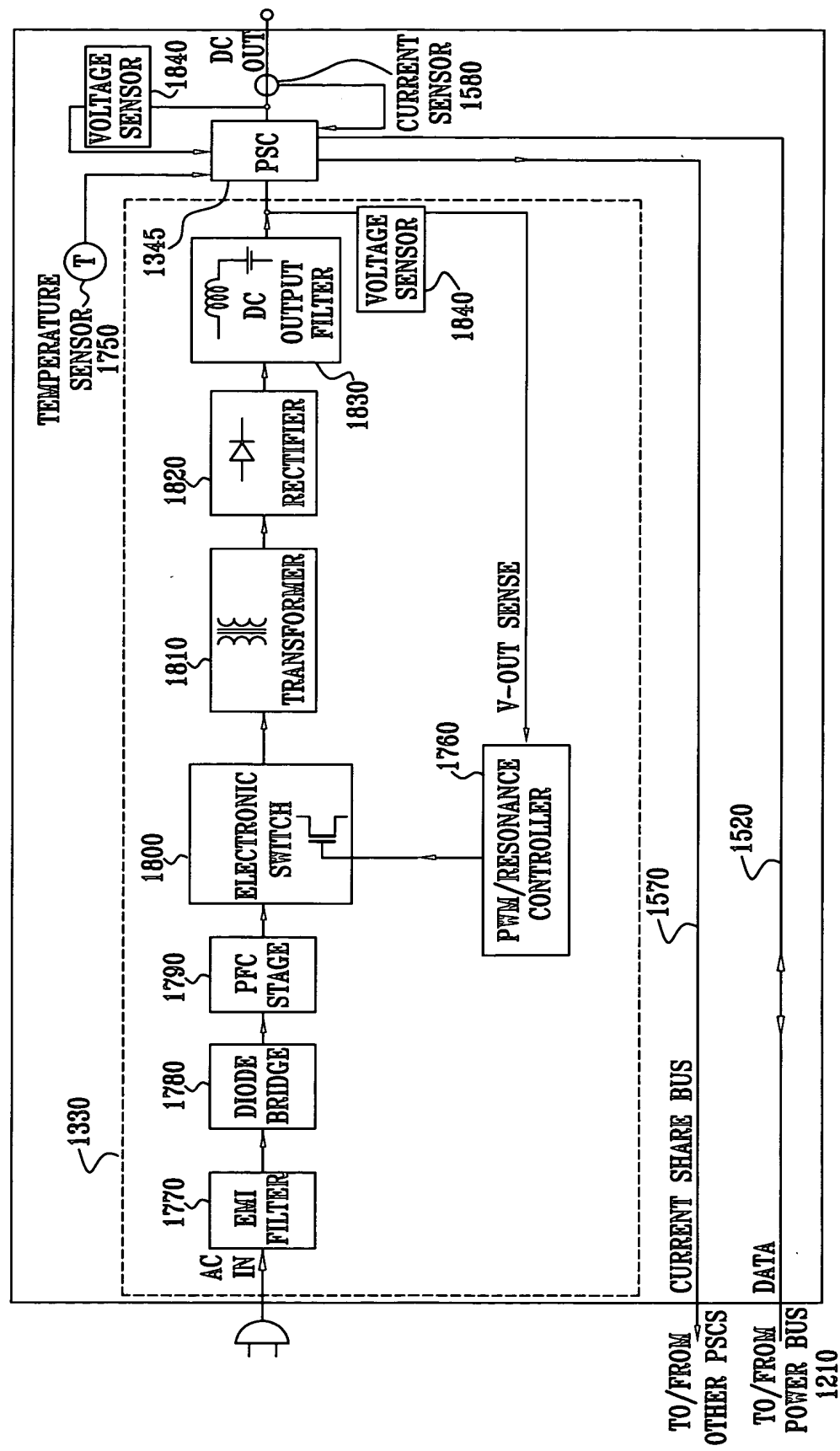


FIG. 24B



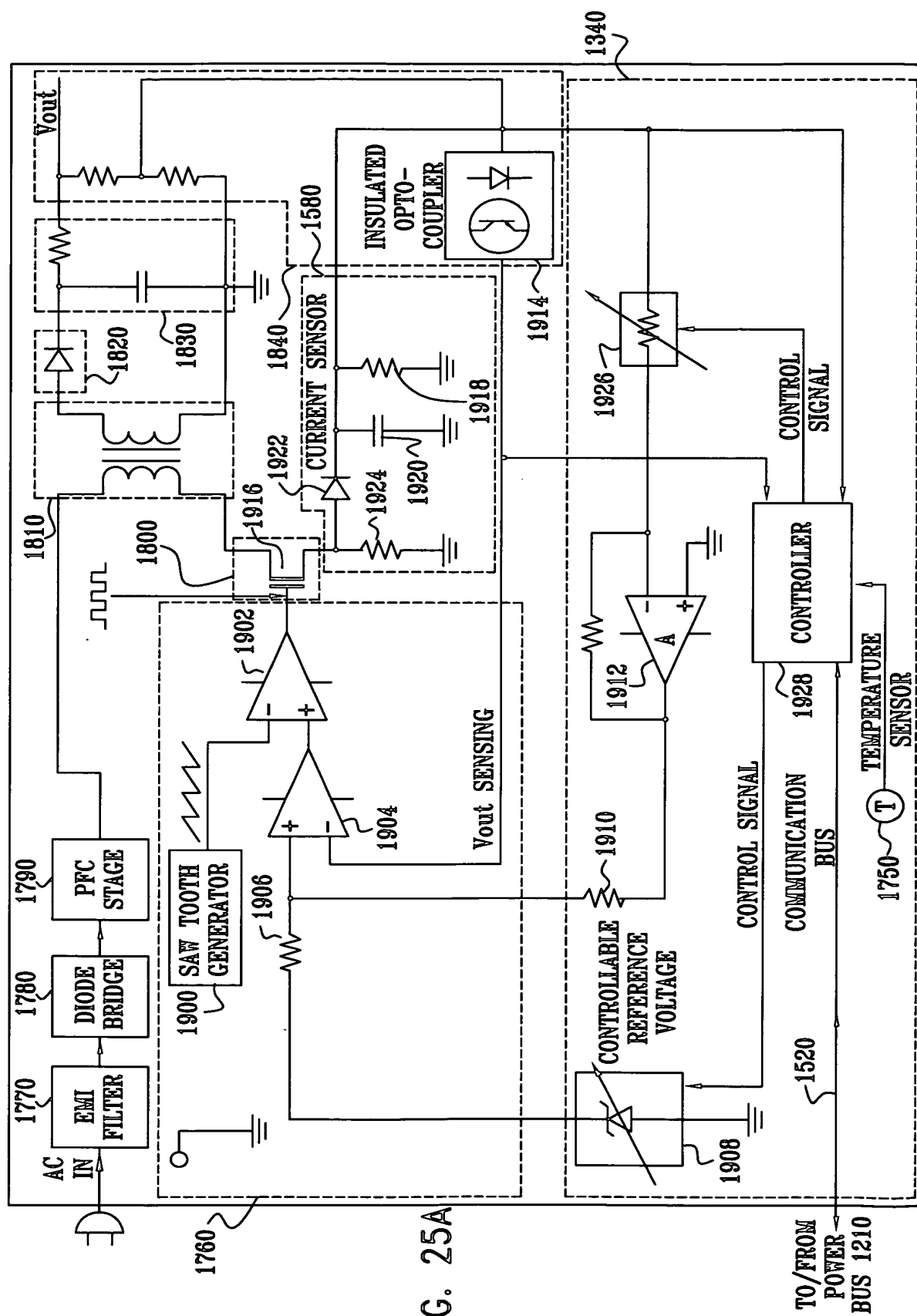


FIG. 25B

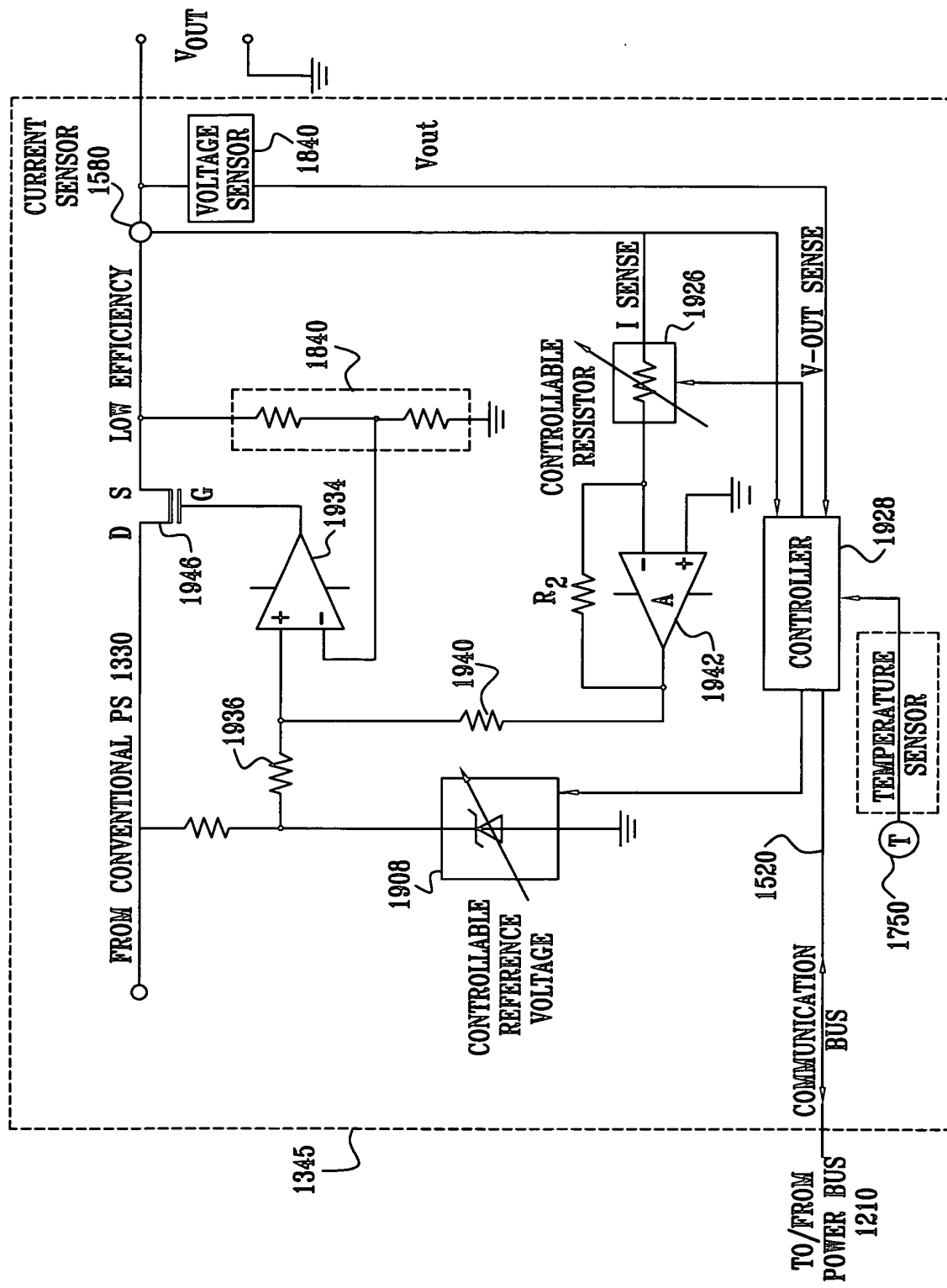


FIG. 25C

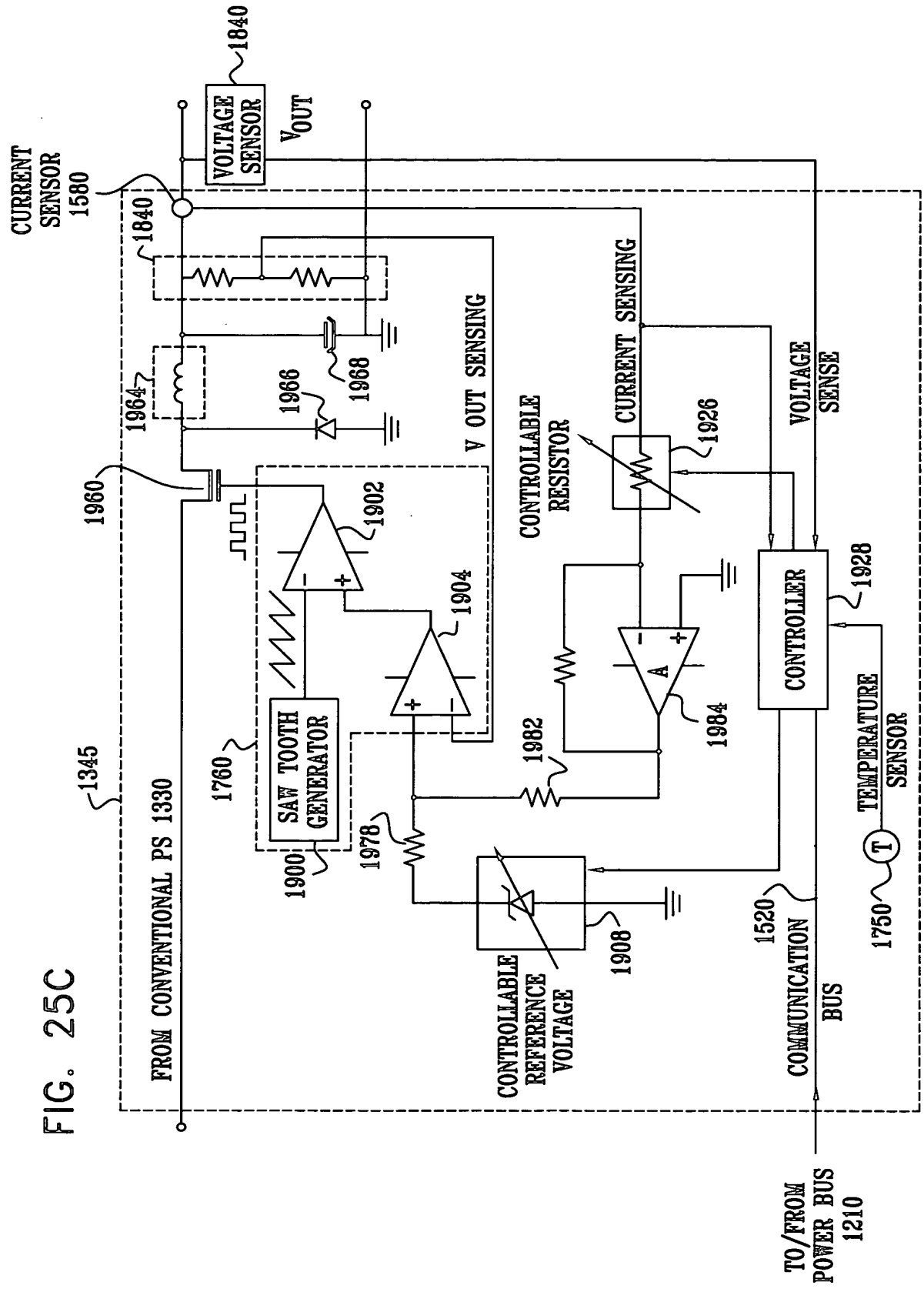


FIG. 26A

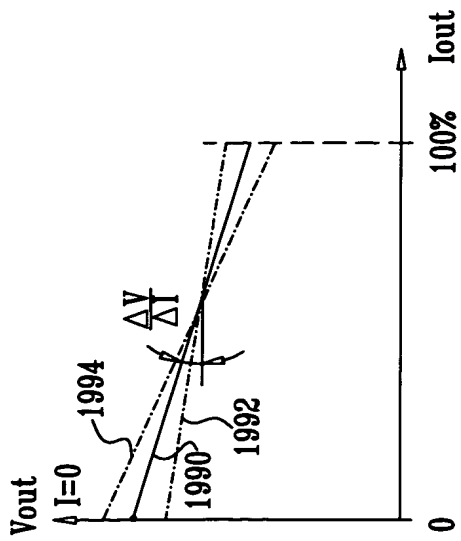


FIG. 26B

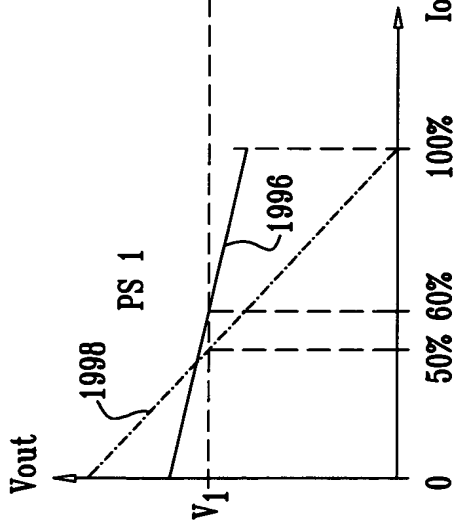
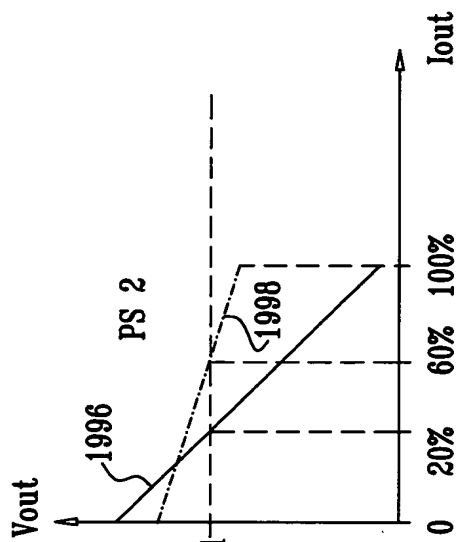


FIG. 26C



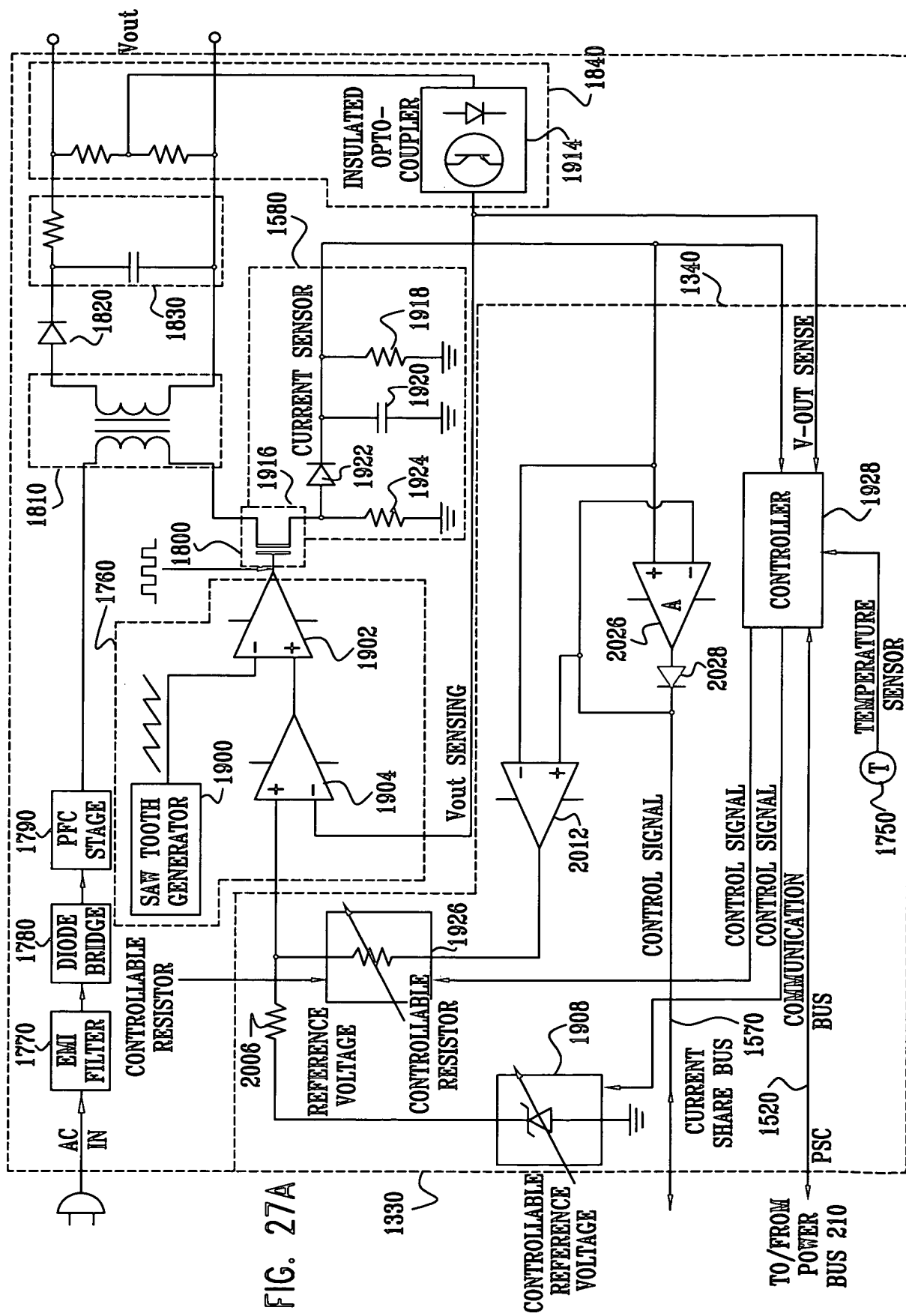


FIG. 27B

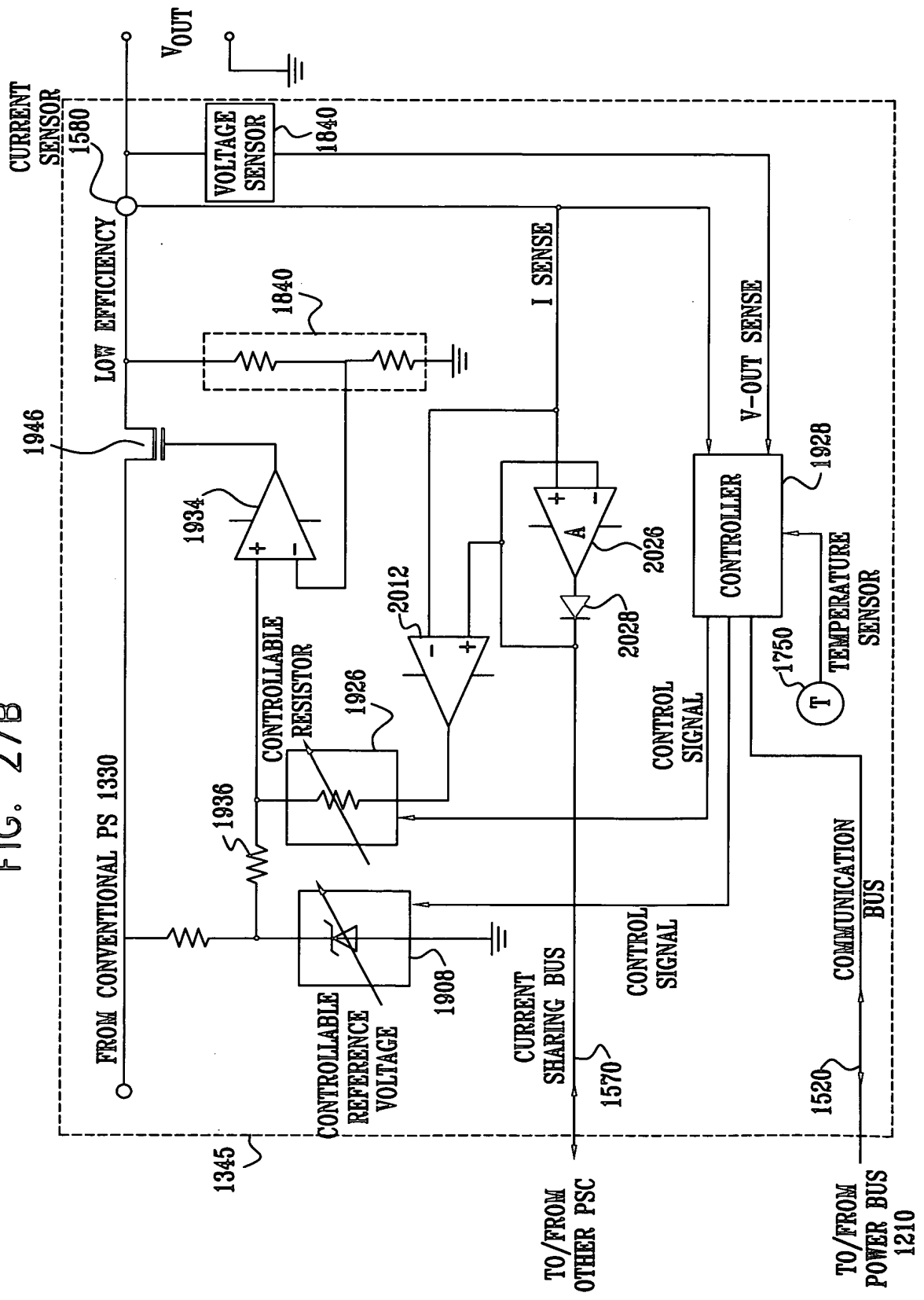


FIG. 27C

The diagram illustrates a power supply system with the following components and connections:

- Power and Communication Buses:**
 - TO/FROM POWER BUS 1210:** Connected to the system via a switch 1333.
 - TO/FROM OTHER PSC 1570:** Connected to the system via a switch 1345.
 - COMMUNICATION BUS 1520:** Connects the system to a **CONTROLLER 1580**.
- Control and Sensing Circuitry:**
 - SAW TOOTH GENERATOR 1900:** Provides a sawtooth waveform to the **CONTROLLER 1580** and a **COMPARATOR 1902**.
 - CONTROL SIGNAL 1908:** Generated by the **CONTROLLER 1580** and sent to a **DRIVER 1904** and a **REFERENCE VOLTAGE 1978**.
 - REFERENCE VOLTAGE 1978:** A variable voltage source connected to the **COMPARATOR 1902**.
 - COMPARATOR 1902:** Compares the sawtooth signal with the reference voltage to generate a **CONTROL SIGNAL 1926**.
 - DRIVER 1904:** Drives a **SWITCH 1928** based on the control signal.
 - SWITCH 1928:** Controls the flow of current through the **INDUCTOR 1964** and **DIODE 1966**.
 - INDUCTOR 1964:** Part of the power conversion stage.
 - DIODE 1966:** Provides a freewheeling path for the inductor current.
 - OUTPUT FILTER 1968:** A capacitor that filters the output voltage.
- Output and Sensing:**
 - V_{OUT}:** The final output voltage of the system.
 - V_{OUT} SENSING:** A feedback path that senses the output voltage and provides a signal to the **CONTROLLER 1580**.
 - CURRENT SENSING:** A feedback path that senses the inductor current (via the inductor 1964) and provides a signal to the **CONTROLLER 1580**.
 - VOLTAGE SENSOR 1840:** An external sensor that monitors the output voltage V_{OUT} and provides a signal to the **CONTROLLER 1580**.

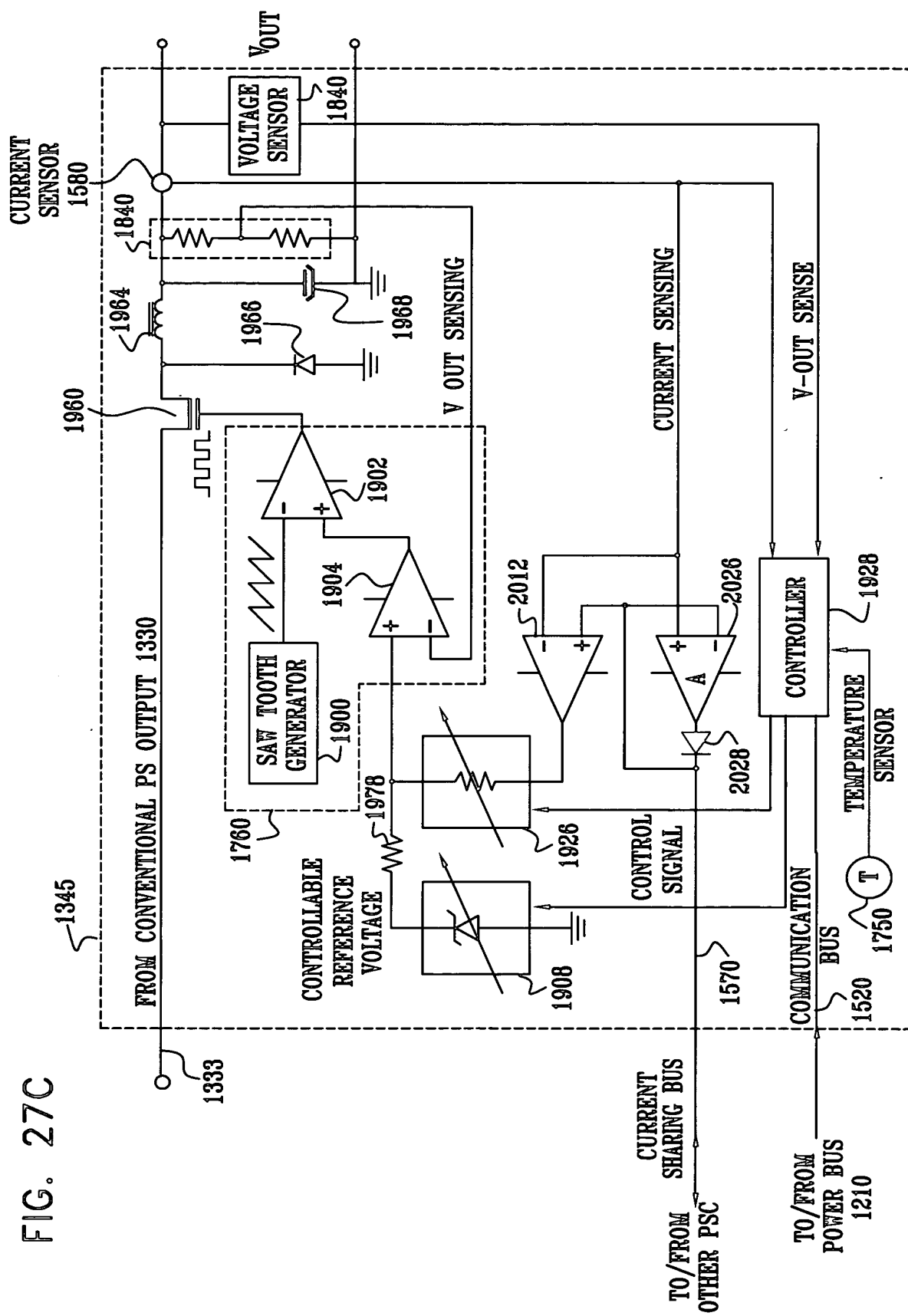


FIG. 27D

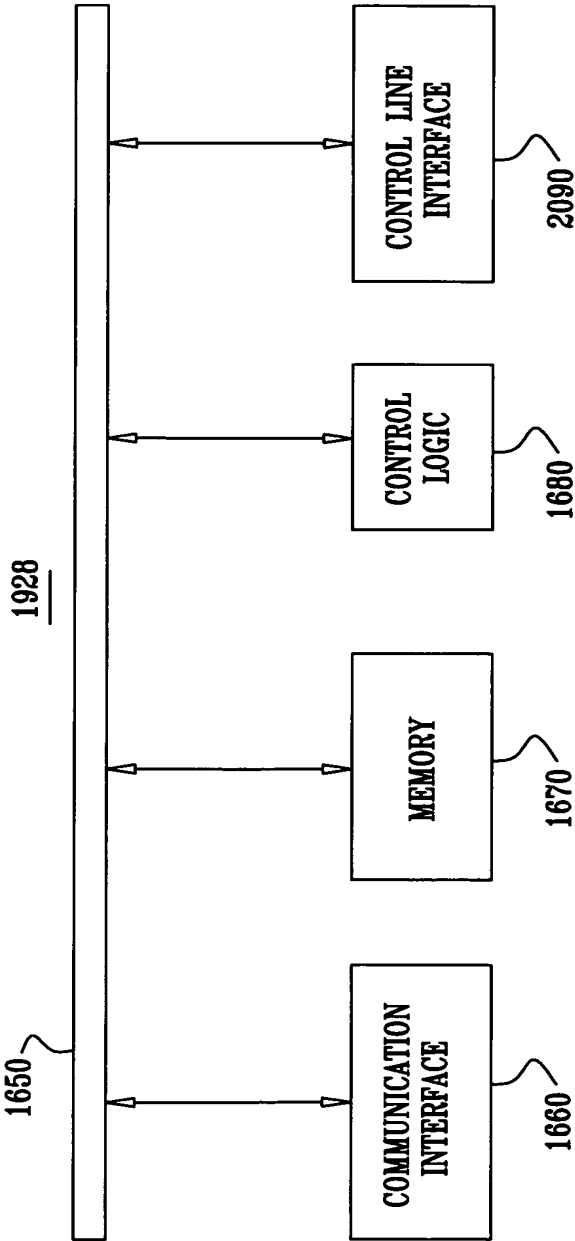


FIG. 28A

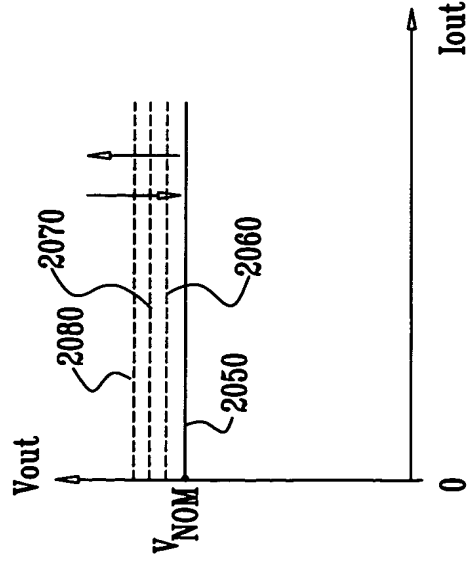


FIG. 28B

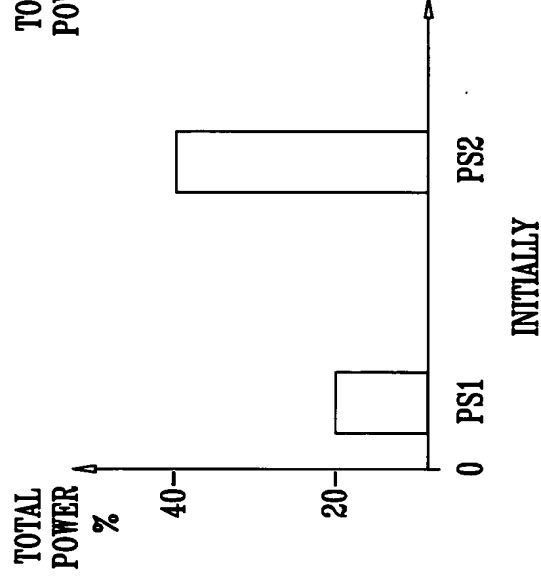


FIG. 28C

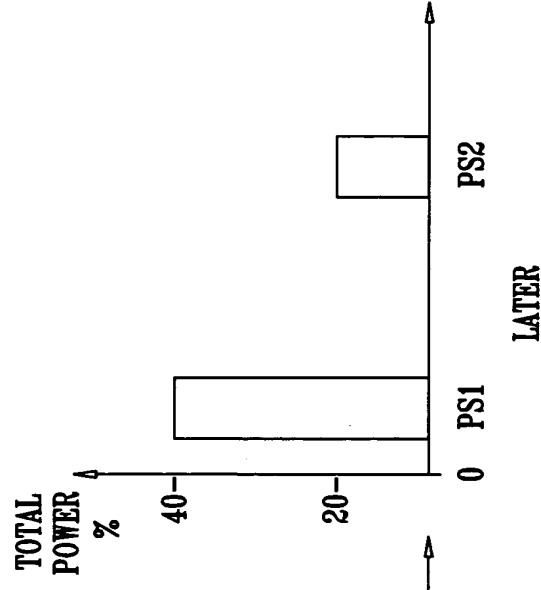


FIG. 29

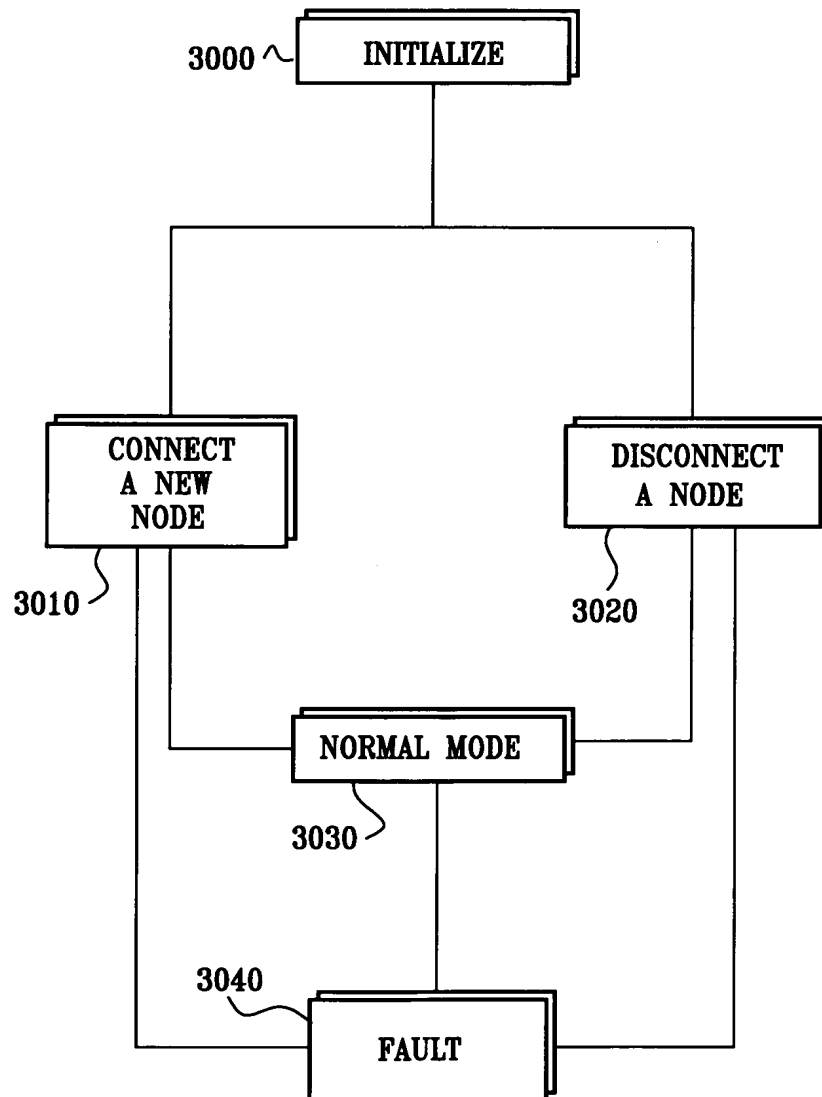


FIG. 30

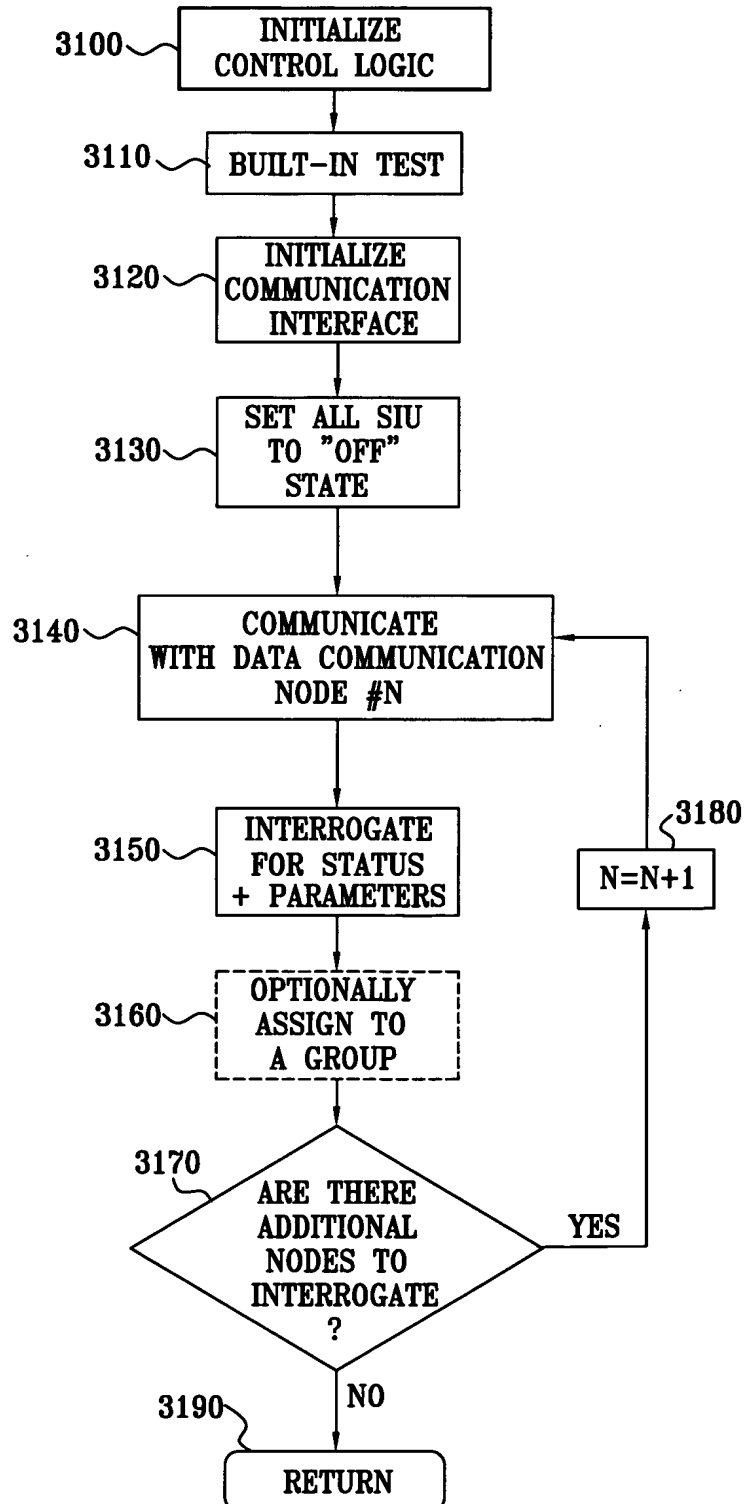


FIG. 31

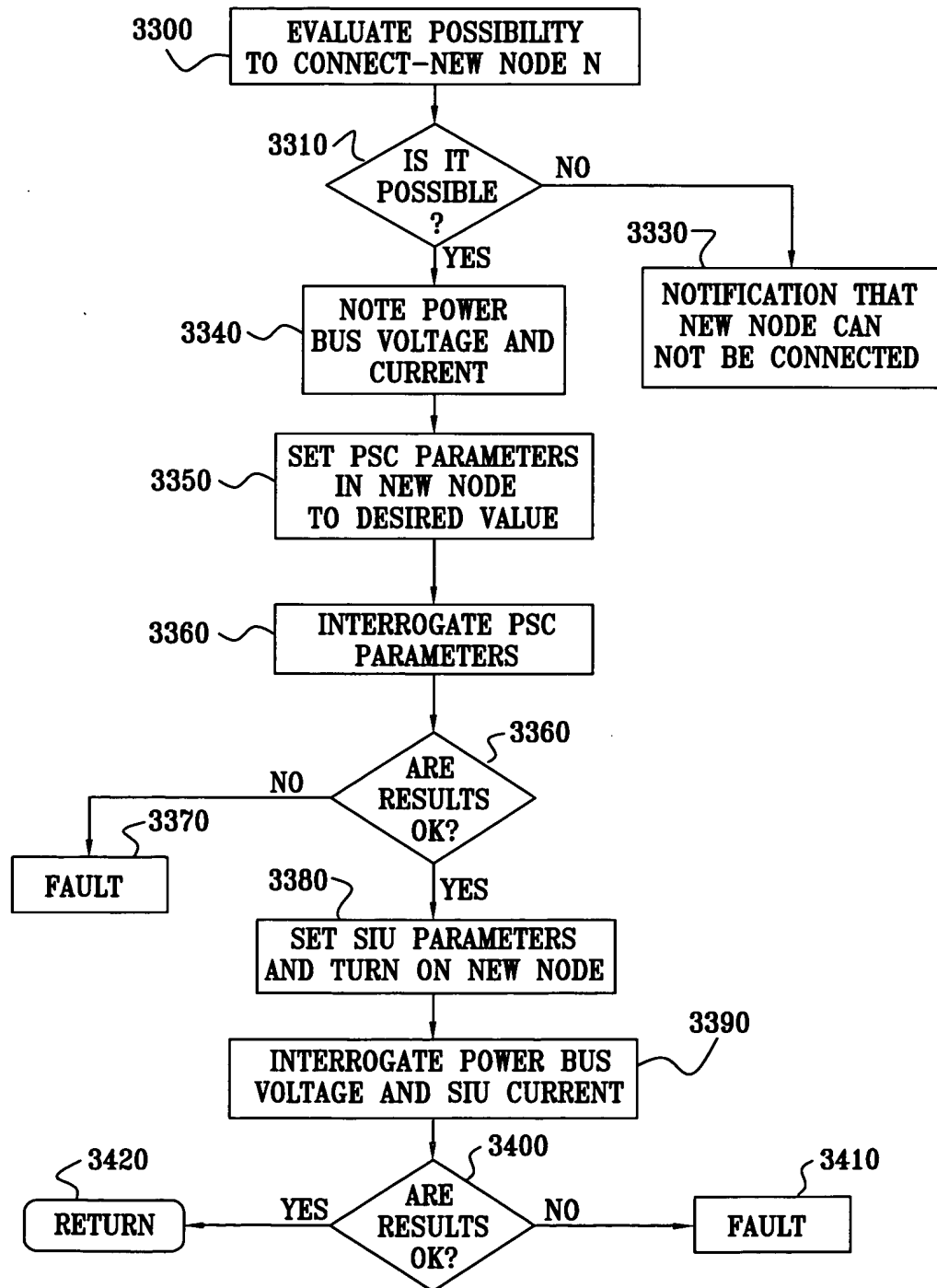


FIG. 32

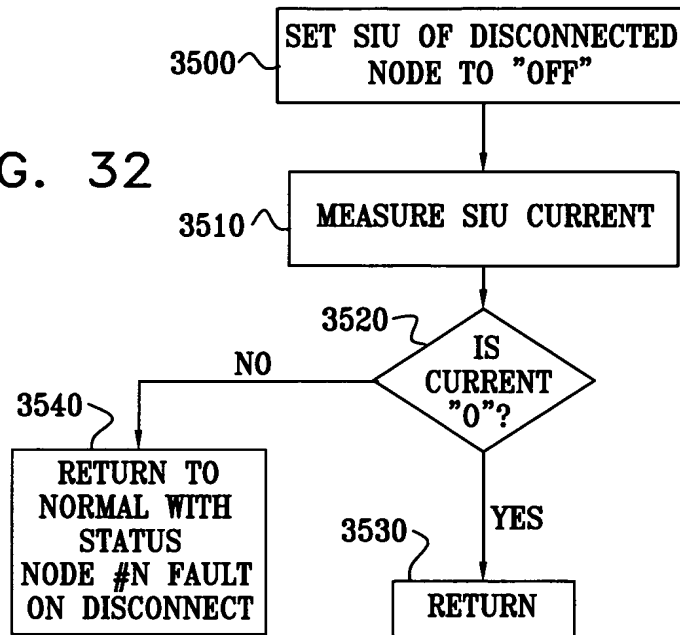


FIG. 33

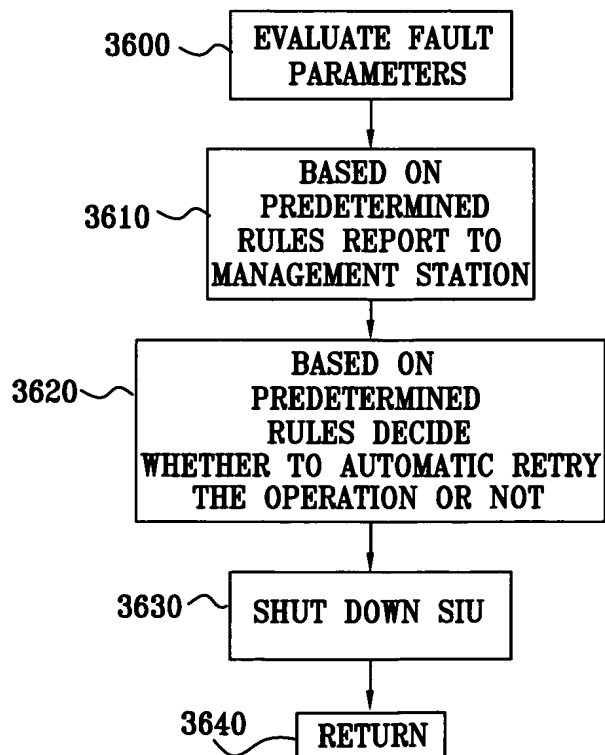


FIG. 34

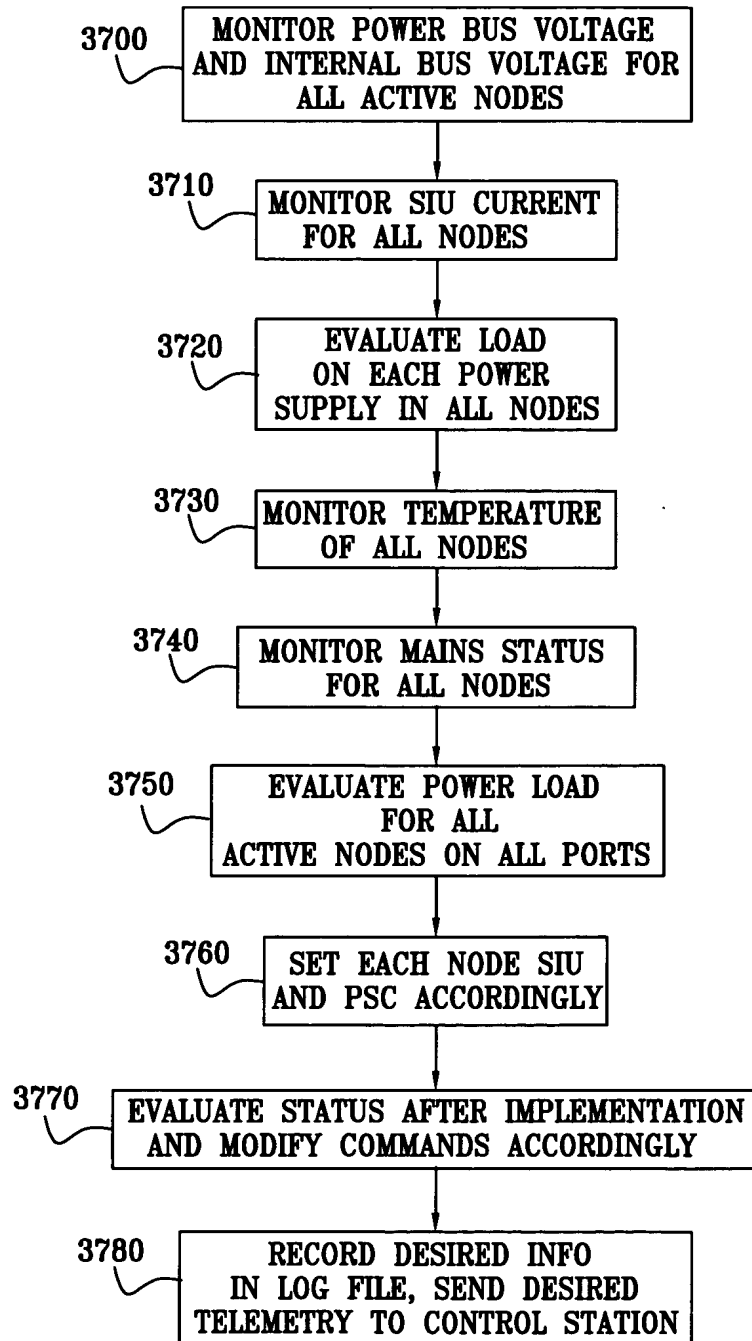


FIG. 35

